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US-China Mutual Vulnerability Perspectives on the Debate

EDITED BY
DAVID SANTORO

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Introduction: The Mutual Vulnerability Question in US-China Strategic Nuclear Relations

David Santoro

"Big states seldom attempt to balance power, and even more seldom do they cooperate with each other. Most frequently, they simply seek to gain power of their own."[1]

Small powers such as North Korea and Iran dominated the international security agenda when the late Thérèse Delpech wrote these words for her book—her last—on *Nuclear Deterrence in the 21st Century*, which was published shortly after she passed away in 2012. In it, Delpech analyzed the challenge posed by small powers but warned about the very real possibility of a renewed and much more dangerous competition between the major powers, notably the United States, China, and Russia.

Ten years later, the return of major power competition is a reality. That shift was confirmed in the mid-2010s, after Russia annexed Crimea in 2014 and after, around that same time, it became clear that China had embraced a more assertive posture, especially in the East and South China Seas. US relations with both countries have deteriorated sharply since, with no sign of improvement. On the contrary, with Russia's invasion of Ukraine in February 2022 and China's increasingly belligerent actions vis-à-vis Taiwan, more troubles might be brewing.

The United States has taken stock of these developments, expressing it most clearly in the 2017 *National Security Strategy*, in which it labels China and Russia "revisionist powers" because "they are contesting [US] geopolitical advantage and trying to change the international order in their favor."[2] The 2018 *National Defense Strategy* puts it even more starkly, stressing that "the central challenge to US prosperity and security is the *reemergence of long-term, strategic competition*" with both countries, especially China.[3] While the Joe Biden administration, in office since 2021, is yet to release its key strategic reviews, this theme will remain front and center in US foreign policy. Significantly, the 2021 *Interim National Security Strategic Guidance* lays out a preliminary agenda in which the Biden administration plans to strengthen US "enduring advantages" to "prevail in strategic competition with China and any other nation."[4]

Still, when it comes to nuclear weapons, the United States has never abandoned the idea that promoting stability with Russia and China—"strategic stability," to use the technical phrase—is a net positive. The 2017 *National Security Strategy*, for instance, stresses that the US deployment of a layered missile defense system is focused on North Korea and Iran and "not intended to undermine strategic stability or disrupt the longstanding strategic relationship with Russia and China."[5] Similarly, the 2018 *Nuclear Posture Review* explains that there is a "return of Great Power competition" but adds that "[t]he United States does not wish to regard either Russia or China as an adversary and seek stable relations with both," insisting on the need for "strategic dialogues" with them.[6] The message of the 2021 *Interim National Security Strategic Guidance* is no different. The Guidance highlights that the United States "will engage in meaningful dialogue with Russia and China on a range of emerging military technological developments that implicate strategic stability."[7]

"Still, when it comes to nuclear weapons, the United States has never abandoned the idea that promoting stability with Russia and China—'strategic stability,' to use the technical phrase—is a net positive."

There are important differences between US-Russia and US-China strategic nuclear relations, however. The United States has an established arms control relationship with Russia, dating back to the Cold War. Russia's invasion of Ukraine has put that relationship, already in trouble, under enormous stress, and it may very well end altogether. Yet for now it remains alive. The US-Russia "strategic stability dialogue" has been suspended but the New Strategic Arms Reductions Treaty, dubbed New START, still regulates US and Russian strategic offensive nuclear forces.

[1] Thérèse Delpech, *Nuclear Deterrence in the 21st Century: Lessons from the Cold War for a New Era of Strategic Piracy* (Washington, DC: RAND Corporation, 2012), p. 118.
[2] *National Security Strategy of the United States of America* (Washington, DC: White House, Dec. 2017), p. 27.
[3] *Summary of the 2018 National Defense Strategy of the United States of America* (Washington, DC: US Department of Defense, Jan. 2018), p. 2.
[4] *Interim National Security Strategic Guidance* (Washington, DC: White House, March 2021), p. 20.
[5] *National Security Strategy of the United States of America*, p. 8.
[6] *Nuclear Posture Review* (Washington, DC: US Department of Defense, February 2018), p. 7.
[7] *Interim National Security Strategic Guidance*, p. 13.

By contrast, the United States does not have—and has never had—an arms control relationship with China. There is no US-China strategic stability dialogue, let alone any agreement to manage US and Chinese nuclear forces because Beijing has systematically resisted engagement. The United States and China have only engaged in strategic stability discussions at the track-2 and track-1.5 (i.e., unofficial) levels, notably in the track-1.5 "China-US Strategic Nuclear Dynamics Dialogue" run by the Pacific Forum in collaboration with the Naval Postgraduate School, and in close partnership with the China Foundation for International and Strategic Studies and the China Arms Control and Disarmament Association. [8] Between 2004 and 2019, this dialogue was "the only show in town"; there is no show anymore, however, now that it is suspended.

US-China Strategic Stability Discussions and the Question of Mutual Vulnerability

Unofficial US-China strategic stability discussions have revealed numerous important insights into Washington and Beijing's thinking about their relationship, and how that thinking has evolved over time. One has been especially central: US and Chinese strategists approach the "strategic stability" concept differently, and they disagree over how to apply it to US-China relations.

To summarize in a few words: US strategists typically define strategic stability narrowly, in a way that prevents nuclear crises and arms races.[9] The focus, simply, is crisis stability and arms-race stability. Chinese strategists, on the contrary, generally define it much more broadly, to include almost all national security and foreign policy. Chinese strategists, plainly, consider the entire balance of the US-China relationship, going way beyond the sole nuclear and even military dimension.

That said, Chinese strategists have explained that Beijing has specific "strategic nuclear" concerns. Because China has a much smaller nuclear arsenal than the United States' and because its nuclear modernization program does not aim to "sprint to nuclear parity," Beijing fears that Washington might not be interested in strategic stability but, instead, in "absolute security," i.e., obtaining the option to negate its second-strike capability.[10] In other words, Beijing is concerned that the United States might want to be in a position to conduct disarming strikes against China, using a combination of nuclear and non-nuclear capabilities.

To Beijing, therefore, US public acceptance or acknowledgement of mutual vulnerability is critical; Beijing, in the same vein, has urged Washington to join it in adopting a no-first use policy. Chinese strategists have said repeatedly that such an acknowledgment would go a long way to help establish the foundation upon which US-China strategic stability can be built, despite the wide asymmetry of forces between the two countries.

According to Chinese strategists, US reluctance to make an explicit and public "vulnerability acknowledgement" (i.e., recognizing that the United States and China are and will remain in a situation of mutual vulnerability, notably in the nuclear domain) has stood as the primary sticking point for Beijing to engage in strategic stability dialogue and to become more transparent about its nuclear capabilities. Taking this first step would lay the groundwork for confidence-building measures and eventually arms control agreements, which have all long been US stated goals. In sum, for China, trust must come first, dialogue second.

The United States, by contrast, believes dialogue should be the starting point to define the organizing principle and key components of the US-China strategic relationship. Its approach has been dialogue first, trust second.

To be sure, many US strategists believe (and have claimed openly) that US-China mutual vulnerability is a "fact of life." On that basis, some have argued that Washington should propose a comprehensive

[8] For analyses about the dialogue, see David Santoro and Robert Gromoll, "On the Value of Nuclear Dialogue with China—A Review and Assessment of the Track-1.5 'China-US Strategic Nuclear Dynamics Dialogue'" *Issues & Insights*, Vol. 20, Nov. 1, Nov. 2020 and Brad Roberts (ed.), *Taking Stock: US-China Track-1.5 Nuclear Dialogue* (Livermore, CA: Center for Global Security Research, Dec. 2020).

[9] It is important to note that the US government has not offered an official definition of strategic stability.

[10] Per the Federation of American Scientists, the United States and China possess 5,428 and 350 nuclear warheads, respectively. See "Status of World Nuclear Forces," Federation of American Scientists, Washington, DC, March 2, 2022, https://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/

pproach based on mutual restraint whereby the United States and China can mitigate their growing strategic capabilities, not just in the nuclear domain, but also in the space and cyberspace domains.[11]

The United States, however, has been reluctant to confirm or deny that it is in a mutually vulnerable relationship with China, fearing in part that doing so might encourage Beijing to become more aggressive at the conventional and sub-conventional levels, notably in its neighborhood and against US regional allies. The concern is real, even though making a vulnerability acknowledgment would not mean equal vulnerability because, as mentioned, Chinese nuclear forces are numerically inferior to Washington's by a large margin.

About the Study

This study analyzes the mutual vulnerability question in US-China strategic nuclear relations. It asks whether the United States should acknowledge mutual vulnerability with China and, if so, how and under what conditions it should do so. The goal is not to give a yes-or-no answer but to provide a comprehensive examination of the issue to better understand the benefits, costs, and risks associated with various options.

Exploring this question is essential not just because it has been central to US-China strategic stability discussions, but also because the relationship between Washington and Beijing is changing fast, and not for the better. Recent evidence that Beijing might be engaged in a much bigger and much faster nuclear build-up than previously thought is raising new questions about the future of US-China strategic relations.[12] In that context, the study will bring clarity to the issue of mutual vulnerability at a critical juncture in the bilateral relationship.

This study is the final product of a year-long project that consisted of workshops with a select number of US strategists/former practitioners as well as strategists from allied countries. One Chinese scholar also participated in the project.

"This study analyzes the mutual vulnerability question in US-China strategic nuclear relations. It asks whether the United States should acknowledge mutual vulnerability with China and, if so, how and under what conditions it should do so."

The workshops explored some of the following questions:

Lessons from the Cold War:

- How instructive is the US-Soviet/Russia strategic nuclear experience, both during and after the Cold War?
- What are the lessons for the US-China strategic relationship?

Benefits, costs, and risks:

- What are the benefits, costs, and risks of the United States acknowledging mutual vulnerability with China?
- Conversely, what are benefits, costs, and risks of the United States *not* making such a vulnerability acknowledgement? What, in other words, lies ahead if US policy remains unchanged? What lies ahead if US policy changes in a way that explicitly commits Washington to escaping a relationship of mutual vulnerability with China?
- In each case, how can the benefits be maximized? How can the costs and risks be mitigated or overcome?

Focus, content, and scope:

- What should be the conditions or requirements for the United States to make a mutual vulnerability acknowledgement with China? What should it get in exchange for?
- If there is a decision to make a vulnerability acknowledgement, what should that

[11] David C. Gompert and Phillip C. Saunders, *The Paradox of Power—Sino-American Strategic Restraint in an Age of Vulnerability* (Washington, DC: National Defense University Press, 2011).

[12] David Santoro, "China: The Forgotten Nuclear Power No More," *PacNet #32*, July 14, 2021, https://pacforum.org/publication/pacnet-32-china-the-forgotten-nuclear-power-no-more

acknowledgment say exactly? What should be its primary focus, content, and scope? What domains should it include? What form should the acknowledgement take? How should it be made—in what context, or using what mechanism(s)?

Implications:

- What are the implications of a vulnerability acknowledgement for the United States, especially for US policy and posture? What are the implications for US allies, especially in the Indo-Pacific?
- What would constitute success following such acknowledgment? What would constitute failure? What would be the early indicators of success (or failure)? How can these indicators be monitored?
- What would be the impact of such a US vulnerability acknowledgement on the Asian and global nuclear orders?

The study addresses these questions and more. It begins with a look back in time, exploring the mutual vulnerability question in US-Soviet relations during the Cold War. Conceived as a baseline for the study's analytical focus, and written by Heather Williams, Chapter 1 defines mutual vulnerability during that period and analyzes two examples often associated with an acknowledgement of vulnerability, identifying when, why, and how the United States did so then, and drawing lessons for US-China relations today.

The two subsequent chapters make the case for and against a US vulnerability acknowledgement with China. Authored by Brad Roberts, Chapter 2 argues that mutual vulnerability is inescapable and should be acknowledged and accepted by the United States to try and stabilize the relationship and help Washington and its allies better compete against Beijing. Chapter 3 makes the opposite case. The author, Matthew Costlow, contends that the assumptions behind the arguments for a vulnerability acknowledgement with China are defective, and he stresses that the associated costs far outweigh the benefits.

Chapter 4 begins with the assumption that the United States has decided to acknowledge mutual vulnerability with China. Penned by Lewis Dunn, this chapter examines how the United States could acknowledge mutual vulnerability, what it could seek to get out of it, and what the metrics of success, failure, or a mixed outcome could be. Dunn also looks at how the United States could convey a decision not to acknowledge mutual vulnerability.

The next three chapters offer the perspectives of three key US regional allies on whether the United States should make a vulnerability acknowledgement with China: Japan, South Korea, and Australia. Masashi Murano provides the analysis from a Japanese perspective in Chapter 5, Seong-ho Sheen from a South Korean perspective in Chapter 6, and Rod Lyon from an Australian perspective in Chapter 7. All three chapters explain how this important question is viewed from Tokyo, Seoul, and Canberra, and detail how and under what conditions a US mutual vulnerability acknowledgement with China would be acceptable or unacceptable.

The penultimate chapter provides a Chinese perspective on the question. Written by Tong Zhao, Chapter 8 delves into Chinese thinking about US-China strategic relations, and the mutual vulnerability question specifically. The chapter also discusses what can be achieved in the current context of increasingly intense US-China strategic competition, and how.

The study closes with a chapter that sets out the conclusions from this work. Authored by me, this chapter brings together the volume's key findings and reflects on the insights and implications for policy, mostly for the United States. The chief conclusion is twofold. First, the mutual vulnerability question will likely gain growing prominence in the US-China strategic nuclear relationship. Second, while that question may not be resolved any time soon, the United States will feel increasingly pressured to either embrace or reject mutual vulnerability with China.

1

Ambiguous Acknowledgement: Mutual Vulnerability during the Cold War and Options for US-China Relations

Heather Williams

A 2012 report by the International Security Advisory Board stated that "mutual nuclear vulnerability should be considered as a fact of life for [the United States and China.]"[1] While this may be a technical reality, public acknowledgement of mutual vulnerability is a political issue: whether an American leader acknowledges mutual vulnerability will depend on several domestic and strategic issues, including assurance to allies and internal bureaucratic pressures, along with prospects for arms control and nuclear risk reduction dialogue.

There is a historical precedent for acknowledging mutual vulnerability. During the Cold War, the United States and Soviet Union acknowledged mutually vulnerability in a series of statements, such as the joint statement following the 1985 Geneva summit, often referred to as the "Reagan-Gorbachev statement"—"a nuclear war cannot be won and must never be fought." Numerous scholars and experts hailed this as a turning point in the rejection of nuclear superiority and avoiding nuclear war.[2] A closer examination of events leading up to, and following, these acknowledgements, however, suggests that this interpretation may have been wishful thinking.

A growing body of research has revealed that mutual vulnerability was never accepted in practice.[3] This chapter demonstrates that it also was never explicitly accepted in words, including in the Reagan-Gorbachev statement. When read in context, many of these statements prove to be either intentionally ambiguous or leaders would contradict them simultaneously by rejecting mutual vulnerability. Hours before signing the Reagan-Gorbachev statement, for example, Ronald Reagan said to Mikhail Gorbachev that their relationship of mutual assured destruction was "uncivilized," and they should try to escape it. Both superpowers continued to pursue strategic superiority out of fear of technological breakthrough that could undermine their nuclear deterrent.[4] Both superpowers avoided using the term "mutual vulnerability" to describe their strategic relationship.

What, then, does acknowledgment of mutual vulnerability look and sound like? Why did US-Soviet joint statements refer to vulnerability so ambiguously? What policy options can this historical analysis offer in considering if, and how, the United States should acknowledge mutual vulnerability with China?

This chapter proceeds in three parts. First, it defines mutual vulnerability during the Cold War, and various ways it can be acknowledged—tacitly, ambiguously, or explicitly. Second, the chapter looks at two historical examples that are often associated with acknowledgement of vulnerability during the Cold War: the 1972 Basic Principles of Agreement as part of the Strategic Arms Limitation Talks (SALT), and the 1985 Reagan-Gorbachev statement following the Geneva summit. Finally, the chapter identifies when, why, and how the United States acknowledged mutual vulnerability in the past and offers three options for how it might do so again vis-à-vis China.

Mutual Vulnerability as a Technical Reality versus as a Policy

Mutual vulnerability is typically defined as when two states have second-strike forces able to retaliate and inflict unacceptable damage in the event of a nuclear first strike.[5] Following the development of Soviet nuclear weapons and long-range delivery systems, the principle of mutually assured destruction (MAD) evolved throughout the 1960s based on the theory that "once nuclear arsenals are sufficiently large and [secure] against preemptive attack… no state can hope to launch a nuclear war without being utterly destroyed in retaliation."[6] Mutual vulnerability, therefore, would require a balance of forces wherein neither side could launch a disarming first strike or deflect a retaliatory strike with strategic defenses. Aaron Miles described this relationship as a strategic equilibrium because "competitors have the ability to strike each other's vital interests without first achieving decisive military victory, but are mutually restrained in doing so…. The existence of such an equilibrium implies a

[1] US Department of State International Security Advisory Board, *Report on Maintaining US-China Strategic Stability*, October 26, 2012.
[2] See, for example, McGeorge Bundy, "To Cap the Volcano," *Foreign Affairs*, vol. 48, no. 1, 1969, pp. 1–20.
[3] See, for example, Keir A. Lieber and Daryl G. Press, "The End of MAD? The Nuclear Dimension of US Primacy," *International Security*, vol. 30, no. 4, April 2006, pp. 7-44; Brendan Rittenhouse Green, *The Revolution That Failed: Nuclear Competition, Arms Control and the Cold War* (Cambridge: Cambridge University Press, 2020); Brendan R. Green and Austin Long, "The MAD Who Wasn't There: Soviet Reactions to the Late Cold War Nuclear Balance," *Security Studies*, vol. 26, no. 4, 2017, pp. 606-641.
[4] See, for example, Green.
[5] See, for example, Caroline Milne, "Hope Springs Eternal: Perceptions of Mutual Vulnerability between Nuclear Rivals", Dissertation presented to Princeton University, November 2017.
[6] Green, p. 1.

balance of opposing forces."[7] The Cuban Missile Crisis in 1962 exposed challenges with this thinking, however, because the fear of total annihilation could undermine the credibility of any deterrent threats, along with the risks of MAD.[8] Instead, nuclear debates in the United States, at least, shifted to considering whether crises could be managed, or if the superpowers should avoid conflict altogether rather than risk escalation to potential nuclear use.

Around the same time in the early 1960s, arms control emerged as a potential tool for managing the risks of arms racing and crisis escalation. A group of thought leaders of the era became known as the "Cambridge Community" and argued that the ultimate objective of arms control was preventing nuclear war.[9] Additionally, they argued, arms control could minimize the damage if war should occur:

> If both Soviet and American forces should succeed, through cooperative measures or unilaterally, in developing reasonable invulnerable retaliatory systems, so that neither could disarm the other in a sudden attack and neither needed to be obsessed with the imminence of attack, a large reduction in numbers might come naturally.[10]

Arms control, therefore, worked in tandem with mutual vulnerability and deterrence. It was a means of ensuring a quantitative balance that would not undermine mutual vulnerability. Francis Gavin described (though did not endorse) this line of thought: "If mutual vulnerability was the goal between nuclear pairs, then negotiated treaties might prevent other external factors from undermining the desired goal of strategic stability. Arms control would stem the action-reaction cycle of the arms race and restrain the domestic and organization forces keen on building more nuclear weapons."[11] Or so the logic went.

In his 2020 book, *The Revolution that Failed*, Brendan Green argued that this vision for arms control was never realized because nuclear competition shifted to other areas and continued simultaneously with arms control efforts.[12] Earlier, in 2017, Green and Austin Long demonstrated that the superpowers continued to pursue strategic superiority throughout this period because they thought they could manipulate the nuclear balance and escape MAD.[13] Yet many scholars during the Cold War and today continue to argue that mutual vulnerability was accepted in practice, as policy. This disconnect between policymakers who did not accept mutual vulnerability and outside experts who insist otherwise raises difficult questions about what acknowledgement of mutual vulnerability sounds like and why it is so often misinterpreted.

"Arms control, therefore, worked in tandem with mutual vulnerability and deterrence. It was a means of ensuring a quantitative balance that would not undermine mutual vulnerability."

I suggest there are three ways leaders might acknowledge mutual vulnerability. First, tacit acknowledgement of mutual vulnerability would be evidenced largely by changes to doctrine and posture, such as through arms control agreements, reductions in strategic forces, or a change in declaratory policy. This would not necessarily be accompanied by any public statements but rather would be reflected in force postures that refrained from the pursuit of strategic superiority. Second, ambiguous acknowledgement of mutual vulnerability would include public and/or private statements speaking to the potential dangers of nuclear war and escalation, but without using terms such as "mutual vulnerability" or "acceptance of parity." Obviously, there are various shades of gray within ambiguous acknowledgement. Finally, explicit

[7] Aaron R. Miles, "The Dynamics of Strategic Stability and Instability," *Comparative Strategy*, vol. 35, no. 5, 2016, pp. 423-437.

[8] James Cameron, *Double Game: The Demise of America's First Missile Defence System and the Rise of Strategic Arms Limitation* (Oxford: Oxford University Press, 2017), p. 33.

[9] Thomas C. Schelling and Morton H. Halperin, *Strategy and Arms Control* (London: Pergamon, 1961). See also Nancy W. Gallagher, "Re-Thinking the Unthinkable: Arms Control in the Twenty-First Century," *Nonproliferation Review*, vol. 22, no. 3-4, 2015, p. 474.

[10] Schelling and Halperin, p. 18.

[11] Francis J. Gavin, "Beyond Deterrence: U.S. Nuclear Statecraft Since 1945", in Linton Brooks, Francis J. Gavin, and Alexei Arbatov (eds.), *Meeting the Challenges of the New Nuclear Age: US and Russian Concepts, Past and Present*, American Academy of Arts and Sciences Research Paper, February 2018.

[12] Green.

[13] Long and Green.

acknowledgement would include terms such as "mutual vulnerability" or an explicit rejection of the pursuit of "nuclear superiority." All three options come with unique challenges, however, as evidenced in historical cases, which persist today in US-China relations.

Cold War Examples of Acknowledging Mutual Vulnerability

There are a small number of instances when the United States and Soviet Union may have acknowledged mutual vulnerability publicly. The preamble to the 1972 Nuclear Non-Proliferation Treaty (NPT), for example, states: "Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples…." The 1990 US-Soviet Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability commits both parties to seek agreements "that improve survivability, remove incentives for a nuclear first strike and implement an appropriate relationship between strategic offenses and defenses…."[14] Two of the most commonly cited examples of when the United States and Soviet Union acknowledged mutual vulnerability which deserve closer examination are in the SALT process of the early 1970s and the 1985 Reagan-Gorbachev statement, repeated in 1987 by Reagan and Gorbachev and in 2021 by Joe Biden and Vladimir Putin.

"Peaceful Coexistence"—The 1972 Basic Principles of Relations

Arms control efforts were slow to materialize following the Cuban Missile Crisis, with exception of the 1963 Washington-Mosco hotline, the first bilateral agreement between the superpowers. In 1967, President Lyndon Johnson initiated a dialogue on strategic arms control in Glassboro, NJ, with his Soviet counterpart, Premier Alexei Kosygin. The main driver behind the talks were advances in Soviet strategic capabilities, achievement of nuclear parity, developments in missile defense technology, and growing concerns about the realities of nuclear war. They struggled, however, to make substantive progress and plans for further talks were cancelled due to the Soviet invasion of Czechoslovakia and the US presidential election. In 1968, President Richard Nixon was elected on a hawkish platform but upon inauguration, his administration agreed to continue strategic arms limitation talks with official delegations meeting in Geneva and Helsinki. The talks that ultimately defined the process, however, happened in Washington, between National Security Advisor Henry Kissinger and Soviet Ambassador Anatoly Dobrynin through a back-channel. Kissinger and Dobrynin achieved a breakthrough in negotiations by agreeing to negotiate on offensive and defensive forces separately, which Nixon announced in May 1971. Following another year of negotiations, the final agreements, the SALT I Interim Agreement and Anti-Ballistic Missile (ABM) Treaty, were signed at a summit in Moscow in May 1972.

In the late stages of preparation for the summit in Moscow, Soviet Foreign Minister Andrei Gromyko gave Kissinger a draft of a document, Basic Principles of Relations on April 22, 1972, during his pre-summit visit to finalize the terms of the agreements. At the time, the National Security Advisor said he would take the document directly to Nixon and not circulate it within the administration because "I did not want to receive a lot of bureaucratic comments from the relevant agencies."[15] Instead, Kissinger and Nixon worked on the document in isolation and planned to submit it to the State Department negotiators and lawyers during the summit, weeks later, under the pretense that it came up in the course of the final discussions. On April 28, Nixon indicated to Dobrynin that he was happy with the draft[16]; however, a week later, on May 6, Kissinger told the Soviet Ambassador about some difficulties he had with it "in regard to NATO." To resolve these difficulties, Kissinger requested additional points of assurance that the understanding should not give any impression that this would increase the risk to third countries, including from conventional weapons.[17] A final concern with the document resurfaced when Nixon arrived in Moscow, and he

[14] "Soviet-United States Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability," June 1, 1996, George H. W. Bush Presidential Library and Museum, Public Papers. Available at: https://bush41library.tamu.edu/archives/public-papers/1938

[15] "Memorandum of Conversation (USSR)", Moscow, April 22, 1972, 11am-5pm, in "Kissinger's Secret Trip to Moscow, April 19-24, 1972" in David C. Geyer and Douglas E. Selvage, *Détente Years* (Washington, DC: United States Government Printing Office, 2007), p. 728.

[16] "Memorandum of Conversation", April 28, 1972, in *Ibid.*

[17] Kissinger summarized his additional points: "A mutual Soviet-US understanding must not leave other countries with the possible wrong impression that understanding preserves or even opens up an additional opportunity for them to launch a nuclear attack against third countries. The understanding must not sound as though it creates a new situation in which attacks on the two countries' allies involving the use of conventional weapons could be encouraged or carried out."

objected to the draft's mention of the "non-use of nuclear weapons" because of concern about how the allies would regard such a statement.[18] Instead, Nixon asked that this part of the document be set aside for future discussions, and he also asked that the draft not be made public so he would have time to discuss it with Secretary of State William Rogers, who was still unaware of its existence. The Soviets acquiesced on the former, but not the latter and Gromyko publicly announced the document during the summit.

The final version of the Basic Principles of Agreement, signed on May 29, 1972, acknowledged mutual vulnerability ambiguously and called for relations to be conducted on the basis of "peaceful coexistence." The text reads:

> They will proceed from the common determination that in the nuclear age there is no alternative to conducting their mutual relations on the basis of peaceful coexistence…. The USA and the USSR attach major importance to preventing the development of situations capable of causing a dangerous exacerbation of their relations. Therefore, they will do their utmost to avoid military confrontations and to prevent the outbreak of nuclear war…. Both sides recognize that efforts to obtain unilateral advantage at the expense of the other, directly or indirectly, are inconsistent with these objectives. The prerequisites for maintaining and strengthening peaceful relations between the USA and the USSR are the recognition of the security interests of the Parties based on the principle of equality and the renunciation of the use of force.[19]

Nixon had insisted on removing a commitment to refrain from use of nuclear weapons because of concerns about how this would be interpreted by the European allies.[20]

The document can be read multiple ways. Neither the 1972 Basic Principles nor the 1973 Agreement on the Prevention of Nuclear War use the phrase "mutual vulnerability," nor do they speak to acceptance of nuclear parity. Additionally, both the United States and Soviet Union continued to pursue strategic superiority suggesting there was no tacit acknowledgement of mutual vulnerability, and although they were ultimately in a mutually vulnerable relationship, they were trying to escape it. As Long and Green conclude, "Soviet leaders remained seriously concerned about the nuclear balance even in an allegedly deep-MAD environment where warheads numbered in the tens of thousands. Soviet leaders were uncertain that they could maintain a secure second strike indefinitely, despite strenuous efforts."[21]

There are at least three reasons why the final text of the Basic Principles was ambiguous. First, Kissinger in particular was cautious about how the allies would interpret the document. He would reflect in his memoirs that "They (allies) were concerned that a strategy which reduced the danger of nuclear war might make conventional aggression more likely"[22] and some European allies did later complain about the document, specifically the phrase "peaceful coexistence."[23] He feared that while accepting parity might reduce nuclear risks, "It clearly placed restraints on our decision to go to nuclear war- upon which Europe based its security."[24] More explicit language could have undermined US credibility.

A second reason for the ambiguous language was domestic politics. While there was pressure to reduce defense spending and even though SALT I and the ABM Treaty were supported overwhelmingly by Congress, Nixon was also under pressure from hawks who criticized him for conceding too much to the Soviets. Specifically, Senator Henry "Scoop" Jackson was hoodwinked into supporting the agreements,[25] but he insisted that their passage

[18] From the transcript: "With respect to our draft agreement on the non-use of nuclear weapons, the President indicated during the conversation that he remains interested in this idea, but that the chief obstacle still remains how the U.S.'s allies will regard this, and how to discuss this subject with them, since some of them will clearly be cool to the idea…." "Memorandum of Conversation", May 18, 1972, in *Ibid.*

[19] "Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics," May 29, 1972.

[20] A year later, Kissinger would lead discussions resulting in the Prevention of Nuclear War Agreement: "Conscious that nuclear war would have devastating consequences for mankind, Proceeding from the desire to bring about conditions in which the danger of an outbreak of nuclear war anywhere in the world would be reduced and ultimately eliminated…. Agree that an objective of their policies is to remove the danger of nuclear war and of the use of nuclear weapons. Accordingly, the Parties agree that they will act in such a manner as to prevent the development of situations capable of causing a dangerous exacerbation of their relations, as to avoid military confrontations, and as to exclude the outbreak of nuclear war between them and between either of the Parties and other countries… will refrain from the threat or use of force against…." "Agreement Between the United States of America and The Soviet Socialist Republics on the Prevention of Nuclear War," June 22, 1973.

[21] Long and Green.

[22] Henry Kissinger, *White House Years* (New York: Simon and Schuster, 2011), p. 501.

[23] *Ibid.*, p. 1581. Kissinger would also describe the allies as "ostriches" and "schizophrenics."

[24] *Ibid.*, p. 125.

[25] See, for example, Cameron.

include his amendment that any future agreements "would not limit the United States to levels of intercontinental strategic forces inferior in the limits provided for the Soviet Union." [26] Jackson's amendment might have stated a desire for parity, but it was underpinned by an enduring skepticism towards cooperation and abandoning the arms race. In an election year, Nixon would benefit more from emphasizing his credibility as a strong leader in standing up to the Soviet Union, rather than pointing to any potential benefits of cooperation and accepting mutual vulnerability.[27]

The quest to escape mutual vulnerability did not end with the Nixon Administration. In July 1980, President Carter signed Presidential Directive 59, which called for nuclear plans and capabilities for "fighting successfully so that the adversary would not achieve his war aims and would suffer costs that are unacceptable" in the event deterrence failed.[28] On the Soviet side, according to a 1982 CIA assessment, "they regard nuclear war as a continuing possibility and have not accepted mutual vulnerability as a desirable or permanent basis for the US-Soviet strategic relationship. They prefer possession of superior capabilities to fight and win a nuclear war with the United States, and have been working to improve their chances of prevailing in such a conflict."[29] Neither side was willing to accept mutual vulnerability either in-words or in their nuclear postures.

"Nuclear War Cannot be Won"—The 1985 Geneva Summit Joint Statement

For President Reagan, this relationship of MAD was unacceptable morally and he was looking for a way out of it.[30] Reagan forged a delicate balance of taking a hardline against the Soviets, while also recognizing nuclear risks and seeking opportunities for cooperation. On March 8, 1983, for example, he portrayed the arms race in terms of good and evil,[31] and in November that year, the Soviets walked out of arms control talks. But shortly thereafter, on January 17, 1984, Reagan gave the "Ivan and Anya speech," appealing to the humanity of Soviet leaders and people, particularly so as to reduce nuclear risks because "A nuclear war could be mankind's last." [32]

Nuclear war became increasingly prominent in Reagan's speeches throughout the era as he navigated this balance. On April 17, 1982, in a radio address, Reagan first used the phrase "a nuclear war cannot be won and must never be fought."[33] When he visited Japan on November 11, 1983, and delivered a speech to the Diet, Reagan used the phrase again,[34] and he repeated it two months later in his 1984 State of the Union address.[35] At the same time, however, Reagan was advocating forcefully for the Strategic Defense Initiative (SDI), which arguably would undermine mutual vulnerability, and was announced in a May 1983 speech. While mutual vulnerability might be desirable for deterrence purposes, it was senseless as a long-term option; instead, Reagan alleged, the United States could escape deterrence by "embark[ing] on a program of research to come up with a defensive weapon that could make nuclear weapons obsolete."[36]

Gorbachev ushered in a new era of dialogue around mutual vulnerability and arms control. In a letter to the new Soviet leader on April 30, 1985, Reagan outlined his vision for how the superpowers might engage to address these issues "on the basis of equality and reciprocity." [37] Gorbachev would later point to Reagan's promises to pursue "equal security, no superiority and movement toward halting the arms race were the conditions for building a cooperative relationship" as the impetus for meeting in Geneva in November 1985.[38] Missile defense took up the majority of debates in Geneva, with Gorbachev arguing SDI would undermine strategic stability by making the United States less vulnerable to nuclear attacks. Reagan insisted SDI was only for research purposes at this stage and he offered to share any missile defense technology with the Soviets

[26] For a helpful analysis of the Jackson Amendment, see Michael Krepon, "The Jackson Amendment", *Arms Control Wonk*, August 6, 2009.
[27] Cameron, p. 5.
[28] "Jimmy Carter's Controversial Nuclear Targeting Directive PD-59 Declassified", National Security Archive Electronic Briefing Brook No. 390, September 14, 2012.
[29] Donald P. Steury (ed.), *Intentions and Capabilities: Estimates of Soviet Strategic Forces, 1950-1983* (Washington, DC: CIA Center for the Study of Intelligence, 1996), p. 2.
[30] See, for example, Bradley Lynn Coleman and Kyle Longley (eds.), *Reagan and the World* (Lexington, KY: University of Kentucky Press, 2017), p. 33.
[31] Ronald Reagan, Speech on March 8, 1983. Available: https://voicesofdemocracy.umd.edu/reagan-evil-empire-speech-text/.
[32] Ronald Reagan, Speech on June 16, 1984. Available at: https://www.nytimes.com/1984/01/17/world/transcript-of-reagan-s-speech-on-soviet-american-relations.html
[33] Ronald Reagan, "Radio Address to the Nation on Nuclear Weapons", April 17, 1982.
[34] Ronald Reagan, "Address Before the Japanese Diet in Tokyo", November 11, 1983.
[35] Ronald Reagan, "Address Before a Joint Session of the Congress on the State of the Union", January 25, 1984.
[36] Ronald Reagan (Doublas Brinkley [ed.]), The *Reagan Diaries* (New York: Harper Collins, 2009), p. 130.
[37] Ronald Reagan, Letter to Mikhail Gorbachev, April 30, 1985.
[38] "Memorandum of Conversation," Fleur d'Eau, Geneva, Switzerland, Plenary Session 11:37am-12:15pm, November 19, 1985.

(which few took seriously, including his own advisors[39]). In discussion with Gorbachev, Reagan *did* acknowledge that they were in a mutually vulnerable relationship, but only two sentences later said that this relationship was unacceptable and something they should try to escape: "Now we are locked in a Mutual Assured Destruction policy. The U.S. does not have as many ICBMs as the Soviet Union, but has enough to retaliate. But there is something uncivilized about this. Laws of war were developed over the centuries to protect civilians, but civilians are the targets of our vast arsenals."[40] Ultimately, Reagan the Great Communicator sent mixed messages about mutual vulnerability.

While the Geneva summit did not yield any breakthroughs in negotiations, Reagan and Gorbachev agreed in a joint statement at the meeting's conclusion in which they expressed a shared desire to engage in further dialogue. The same joint statement included Reagan's phrase that "a nuclear war cannot be won and must never be fought," along with the statement that "They will not seek to achieve military superiority."[41] The idea of a joint communique had come up before the summit, but the US interagency was skeptical of anything "joint," and Secretary of State George Schultz wanted to avoid any language that "smacked too much of the détente days," including the terms, "communique," "peaceful coexistence," and "nonuse of force."[42] Instead, Reagan and Schultz decided not to draft any language in advance, but instead see how the summit proceeded and if there was sufficient material for an agreed statement. Like the Basic Principles document, any statements acknowledging mutual vulnerability were kept in isolation from the interagency. In the final plenary of the summit, Reagan was supportive of drafting a joint statement, whereas Gorbachev was initially more ambivalent but came to support the idea on the grounds that "it would be inappropriate to seek simply to list minor agreements in a joint document…A more substantive statement would be necessary."[43] Drafting was turned over to Schultz and Shevardnadze.

Since 1985, the statement has been praised as an exemplar of acknowledgement of mutual vulnerability. Reflecting on the Reagan-Gorbachev statement in 1989, McGeorge Bundy wrote in the pages of *Foreign Affairs*: "the last years have brough a recognition, on both sides, of the fundamental reality that, in the future as in the past, the two superpowers will remain in a condition of mutual vulnerability that makes the avoidance of war between them an absolutely primary common interest."[44] More recently in 2020, Lewis Dunn and William Potter wrote about the "Reagan-Gorbachev Principle" underpinning the statement, whereby there was a "shared recognition in Washington and Moscow of the risks of using nuclear weapons and the need to stabilize the 'balance of terror.'"[45]

Despite these interpretations from outside government, the statement itself remains ambiguous in acknowledging mutual vulnerability. On the one hand, the commitment to "not seek to achieve military superiority" would seem to be an explicit acknowledgement. Additionally, subsequent arms control agreements between the United States and Soviet Union would suggest there was tacit acknowledgement of mutual vulnerability and reliance on arms control to maintain a strategic equilibrium. On the other hand, Reagan's contemporaneous statements about rejecting mutual vulnerability and pursuit of strategic defense research complicates the picture. For example, in the final plenary meeting in Geneva, in a summary of his discussions with Gorbachev, Reagan "repeated his conviction of a need for a shift from deterrence based on strategic arms to a greater reliance on defensive systems."[46] Subsequent speeches, defense programs, and investments suggest strongly that Reagan might have acknowledged mutual vulnerability, but he was looking for a way to escape it. In the context of strategic stability, this equated to acceptance of crisis stability but without arms race stability.[47] When read as a stand-alone, the 1985 joint statement is explicit in acknowledging mutual vulnerability. When read in the context of the wider negotiations during Geneva and Reagan's other statements, it is ambiguous and

[39] See, for example, Ken Adelman, *Reagan at Reykjavik: Forty-Eight Hours That Ended the Cold War* (New York: Harper Collins, 2014).

[40] "Memorandum of Conversation", Fleur d'Eau, Geneva, Switzerland, Plenary Session 2:30-3:40pm, November 19, 1985.

[41] "Joint Soviet-United States Statement on the Summit Meeting in Geneva," Geneva, Switzerland, November 21, 1985.

[42] George Schultz, *Turmoil and Triumph: My Years as Secretary of State* (New York: Charles Scribner's Sons, 1993), ebook loc 12173.

[43] "Memorandum of Conversation", Fleur d'Eau, Geneva, Switzerland, Plenary Session 2:45-3:30pm, November 20, 1985.

[44] McGeorge Bundy, "Ending a Common Danger", *New York Times*, August 20, 1989.

[45] Lewis Dunn and William Potter, "Time to Renew the Reagan-Gorbachev Principle", *Arms Control Today*, March 2020.

[46] "Memorandum of Conversation", Fleur d'Eau, Geneva, Switzerland, Plenary Session 2:45-3:30pm, November 20, 1985.

[47] I am grateful to Fiona Cunningham for flagging this distinction.

reflects the conflict of acknowledging mutual vulnerability while trying to escape it.

The main reason for ambiguity in the Reagan-Gorbachev statement was domestic politics. Reagan deferred deciding about a joint statement in advance because of pressure from the Department of Defense and CIA, in particular, to avoid anything that could be perceived as "joint" or conciliatory towards the Soviets. More importantly, Reagan's views reflected largely those of the US public, which supported missile defense more than a nuclear freeze because it would make the United States less vulnerable. [48] Reagan himself never gave up on the idea of escaping mutual vulnerability and continued to pursue SDI, whereas Gorbachev seemed more accepting of strategic equilibrium. This may have been out of economic necessity and aligned with Gorbachev's "new thinking" that included economics, social, and foreign policy changes to improve the quality of life in the Soviet Union. In a July 1986 Politboro meeting, he stated that "Global nuclear war can no longer be the continuation of rational politics, as it would bring the end of all life, and therefore of all politics"[49] and he interpreted the "Reagan-Gorbachev" statement to undermine the logic of nuclear stockpiling and arms racing.[50]

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Mutual Vulnerability and US-China Relations

These historical cases point to trends as to when, why, and how states acknowledge mutual vulnerability. During the Cold War, the United States and Soviet Union acknowledged mutual vulnerability as part of an ongoing dialogue process, rather than a stand-alone statement. Discussion of both the Basic Principles of Agreement and the Geneva joint statement came towards the end of a summit, but at the beginning of a longer arms control dialogue process. Leaders in Washington and Moscow acknowledged mutual vulnerability because it facilitated continued engagement, but it did not necessarily reassure either side. Competition continued despite these acknowledgements, although it often shifted to different domains. For example, following the Basic Principles of Agreement, the United States had to halt quantitative competition in strategic delivery vehicles to meet the SALT I levels, but continued to pursue qualitative superiority with MIRVs. Likewise, the Soviets continued to seek superiority. From Washington's perspective, the primary reason for ongoing competition seems to have been uncertainty about technological change and whether Russia would accept a stable equilibrium.

In terms of *how* the superpowers acknowledged mutual vulnerability, US and Soviet leaders did so in ambiguous statements and language. From the perspective of the United States, this ambiguity was due to concern about credibility with US allies, whereby a strong statement might be perceived as undermining their security, and because of domestic pressures to avoid being seen as too conciliatory to the Soviets. Bureaucratic and organizational factors also inhibited US leaders from acknowledging mutual vulnerability more explicitly. Janne Nolan's research points to the "schism" between political and operational assumptions in developing nuclear strategy on the issue of mutual vulnerability, [51] and Scott Sagan attributes rejection of MAD to organizational forces.[52] These bureaucratic pressures limited what political leaders could sign up to, even when they drafted statements in isolation from other agencies, as occurred in both Cold War cases.

Many of these factors continue to impact US strategic thinking: technological uncertainty, concern about credibility with allies, and internal bureaucratic disputes about cooperating with peer competitors. With these limitations in mind, then, how might

[48] See, for example, Schultz.

[49] Richard Rhodes, *Arsenals of Folly* (New York: Knopf, 2007), ebook loc 499. Rhodes suggests Gorbachev was thinking of Chernobyl at the time.

[50] *Ibid., loc 4359*

[51] Janne Nolan, *Guardians of the Arsenal: The Politics of Nuclear Strategy* (New York: Basic Books, 1989) p. 290.

[52] Scott D. Sagan, "Nuclear Revelations About the Nuclear Revolution," Book Review Roundtable: *The Revolution that Failed* (Green), June 14, 2021.

Washington acknowledge mutual vulnerability with China, if it decides to do so?

But first, it is important to point out some significant differences between the contemporary and Cold War cases that should caution against too close of a comparison. The most obvious difference between mutual vulnerability in the US-Soviet and US-China relationships is an asymmetry in nuclear forces. Whereas the United States has a limit of 1550 operational strategic deployed warheads under the 2010 New Strategic Arms Reduction Treaty, China is estimated to have approximately 350 nuclear weapons.[53] These are believed to be paired either with ICBMs or on mobile missiles and could survive a first strike to retaliate. While China might appear to be the "weaker actor" in the nuclear domain, it can still hold US assets at risk and take measures to minimize its own vulnerability.[54] China's non-nuclear strategic activities suggest it might be seeking superiority, particularly in the cyber realm.[55] Another important distinction is contextual. Current-day China is not the Soviet Union of the late 1980s, and Xi Jinping is not Mikhail Gorbachev. The unique moment of US-Soviet cooperation hinged on a multitude of political and personal factors, and a similarly cooperative atmosphere does not pervade US-China relations at present. Additionally, the US-Soviet relationship was a bilateral one, whereas today the United States is balancing multiple near-peer competitors, along with the requirements of a geographically diverse group of allies. China, too, is primarily focused on the United States but also does defense planning with other nuclear-armed states in mind: India, Russia, even most probably North Korea. With these caveats in mind, the historical record points to at least three options for US policymakers in responding to China's request to acknowledge mutual vulnerability.

First, the United States and China could incorporate discussion of mutual vulnerability into a wider set of dialogues, either bilaterally or multilaterally. This would resemble the Cold War, when neither US nor Soviet leaders held dialogue hostage to acknowledgement of mutual vulnerability. Instead, ambiguous acknowledgement happened early in an arms control process, and was focused on dialogue rather than outcomes. Chinese nuclear expert Tong Zhao has made a similar recommendation for the five nuclear-armed states recognized by the Nuclear Nonproliferation Treaty to "start a dialogue on how to create necessary conditions to endorse mutual vulnerability and NFU with each other."[56] Such a conversation might occur in the context of the "P5 process" dialogues on transparency of doctrines, which are part of efforts to encourage progress towards nuclear disarmament among the Five.

"While China might appear to be the 'weaker actor' in the nuclear domain, it can still hold US assets at risk and take measures to minimize its own vulnerability."

Second, the United States and China could agree to a joint statement acknowledging mutual vulnerability ambiguously. While the P5 repeated the Reagan-Gorbachev statement in January 2022, the United States and China might also consider a bilateral statement discussing mutual vulnerability more explicitly. On the one hand, a bilateral statement could lay some important groundwork for future dialogues, potentially to include arms control. On the other hand, a bilateral statement might be perceived as bestowing primary importance on the US-China relationship at the expense of European security. The challenge with these first two options, however, is that they might be perceived as a waning commitment to US allies' security, as occurred in the case of the 1972 Basic Principles of Relations. Such cooperation might also face challenges from within the US interagency similar to what Reagan and Schultz observed in the lead-up to the Geneva summit.

Third, US leaders could ask China to clarify what acknowledgement of mutual vulnerability would look like by inviting Beijing to make the first move. For example, Xi could invite Biden to engage in a bilateral dialogue based on the principles of strategic

[53] Federation of American Scientists, "Status of World Nuclear Forces". Available at: https://fas.org/issues/nuclear-weapons/status-world-nuclear-forces/.

[54] Daniel Sobelman, "Learning to Deter: Deterrence Failure and Success in the Israel-Hezbollah Conflict, 2006-16, *International Security*, vol. 41, no. 3, Winter 2016/17, p. 165.

[55] Ariel E. Levite, Lyu Jinghua, George Perkovich, Lu Chuanyink, Xu Manshu, Li Bin, and Yang Fan, *China-US Cyber-Nuclear C3 Stability*, Carnegie Endowment for International Peace, April 2021.

[56] Tong Zhao, "What the Five Nuclear Weapon States Can Do to Contain Nuclear Risks", in Brad Roberts (ed.), *Major Power Rivalry and Nuclear Risk Reduction: Perspective from Russia, China, and the United States* (Livermore, CA: Center for Global Security Research, May 2020).

equality and shared interests. This option would resemble the evolution of Reagan and Gorbachev's dialogue, culminating in the joint statement. Such an overture could be made publicly, such as in the P5 dialogue, or privately, such as through a letter. This is a relatively low risk option from the US perspective as it puts the ball firmly in China's court to make the first move. How the United States responds would require delicate consideration of allies' security and other agenda items. The challenge, however, is that Beijing might insist they have already made such overtures through a no-first use doctrine and refuse to make additional overtures. In which case, it would be fair to assume that Beijing wants acknowledgement of mutual vulnerability for political posturing, rather than for security purposes and whether it is stated publicly should not be a priority for the relationship.

Conclusions

In 1985, just months before the Geneva summit and Reagan-Gorbachev statement, Fred Ikle called out mutual vulnerability as a "fallacy": "this stable equilibrium of 'two sides' defenselessly poised for mutual assured destruction has never existed."[57] This chapter has demonstrated that acknowledgment of mutual vulnerability during the Cold War was also a fallacy. It was always ambiguous. It occurred typically early in an arms control process but did not foretell an end to strategic competition. Historically arms control agreements might freeze competition in a certain domain (e.g., strategic deployed weapons) but shift it to another one (e.g., strategic defenses, intermediate-range weapons, or conventional forces). For the United States and China, therefore, a broader dialogue that can adapt readily to a changed geostrategic landscape and be flexible in its format and agenda might prove the best model. This approach would also provide opportunities for US and Chinese officials to build relationships, test our cooperation, and lay the groundwork for more specific talks, potentially to include arms control.

Explicit acknowledgement of mutual vulnerability likely would be at odds with the Biden Administration's commitment to allies. Tacit acknowledgement would mean foregoing the pursuit of strategic superiority, which also seems unlikely given China's growing nuclear arsenal and reliance on non-nuclear strategic systems. The same technological uncertainty that drove competition during the Cold War despite arms control agreements is pervasive in current US-China relations. Any acknowledgement of mutual vulnerability, therefore, should be taken with a grain of salt because it will not signal acceptance of parity or abandonment of the quest for superiority. Ideally, acknowledgement of mutual vulnerability, even ambiguously, would precede a robust arms control process. In practice, however, stronger risk reduction measures, potentially independent of arms control, should be a priority and not be held hostage to ambiguous and potentially meaningless political statements.

[57] Fred Charles Ikle, "Nuclear Strategy: Can There Be a Happy Ending?" *Foreign Affairs*, Spring 1985, p. 45.

2

Rethinking Mutual Vulnerability in an Era of US-China Strategic Competition

Brad Roberts

China's accelerated development of an "advanced strategic deterrent," as announced by President Xi Jinping in March 2021, is certain to drive many new debates about US nuclear and strategic policy and present the United States and its allies with many choices outside their comfort zone.[1] China's nuclear build up will confront the United States with a choice about whether to continue on the trajectory toward further reductions in the role and number of nuclear weapons. China's growing theater nuclear force will bring difficult questions about the role of the US nuclear umbrella in protecting US allies from China. China's opposition to joining the current arms control process will raise difficult questions about the prospective benefits of "a strategy to put diplomacy first" in the search for nuclear order.[2] China's increasingly robust nuclear infrastructure will raise new questions for the United States about whether stockpile sustainment alone is an adequate hedge against possible new future nuclear requirements. China's refusal to explain its secretive build up and to bring its transparency practices into alignment with those of the other nuclear-weapon states raises new questions about how to avoid a burgeoning arms race.

Of the new debates, one of the sharpest is likely to center on the question, long posed by China, whether the United States accepts as a matter of principle mutual vulnerability as the basis of the bilateral strategic/nuclear relationship with China. Mutual nuclear vulnerability is a condition between two adversaries in which neither has the ability to conduct a preemptive strike on the other without fear of devastating retaliation. The United States has accepted this principle in its relationship with Russia, ever since agreeing to the Anti-Ballistic Missile (ABM) Treaty in 1972, which codified mutual assured destruction, or "MAD." It did so reluctantly, having concluded that the stability of deterrence it promised (by reducing the pressure in crisis to be the first to cross the nuclear threshold) was more valuable to the United States than whatever might be gained through continued offense/defense competition. In contrast, the United States has rejected mutual vulnerability with regional challengers (a.k.a. "rogue states") on the argument that deterrence cannot be stabilized with such states and continued offense/defense competition promises protection from coercion and aggression by rogue leaders.

Accepting mutual vulnerability involves more than acknowledging the technical realities of force-on-force calculations; it also means accepting that the adversary has confidence in its ability to retaliate against the United States (because this removes the pressure to "go first" in a crisis, thereby reducing crisis instability). It implies the tailoring of the strategic military posture to this circumstance and avoiding capabilities that could deny the adversary confidence in the ability to retaliate.

The practical alternatives to acceptance of mutual vulnerability are (1) rejection, (2) acknowledgement but not acceptance, and (3) forestalling, on the argument that the US answer depends on the future behavior of the adversary.

When it comes to China, this issue has long been outside the US comfort zone, as the United States has been reluctant to choose. Presidential administrations from Clinton to Trump sought to reassure China that missile defense of the US homeland is not intended to negate the large-scale nuclear strikes of which China is capable. But this is only a partial answer to the question. It is, moreover, un-reassuring to a nation that has prepared for small-scale strikes on the US homeland after having absorbed a first blow from the United States, and has watched Washington assemble the means to deliver such a blow, including by non-nuclear means, while also promising to employ its missile defenses against any incoming missiles, whatever their sources.[3] Beijing is particularly troubled by the US pursuit of prompt, long-range, conventional strike capabilities on the argument that Chinese threats of nuclear retaliation (and the implied large-scale casualties) might not be credible to the United States if US non-nuclear preemption inflicts only very limited casualties on China.

In unofficial nuclear-focused dialogues between the United States and China, the small community of officials and experts engaged with this topic have generally argued to Chinese counterparts that the United States tacitly accepts mutual vulnerability but will not do so in a politically binding way. That

[1] As discussed in Tong Zhao, "What's Driving China's Nuclear Buildup?" Online Commentary, Carnegie Endowment for International Peace, August 5, 2021.

[2] From the Interim National Security Strategic Guidance, White House, March 3, 2021. See also Henrik Stalhane Hiim and Magnus Langset Troan, "Hardening Chinese Realpolitik in the 21st Century: The Evolution of Beijing's Thinking about Arms Control," *Journal of Contemporary China* (2021), pp.1-15.

[3] Wu Riqiang, "China's Anxiety About US Missile Defence: A Solution," *Survival*, vol. 55, no. 5, October-November 2013, pp. 29-52.

community has offered two explanations for this approach. One is that a clear political commitment to mutual vulnerability would be troubling to US allies. The other is that future US political acceptance is de facto contingent on future Chinese behavior (with the United States being less willing to reassure a China that becomes more assertive militarily). [4] This approach is shaped significantly by the experience of the Obama administration, which sought to provide strategic reassurances to China on this and related topics—only to discover that what had been intended as messages of cooperation and restraint were received by Beijing as messages of retreat and appeasement.[5]

This "answer" to China's strategic question had a certain logic in the era in which it was formulated, even if it was not a particularly satisfying answer for Beijing. Between the end of the Cold War and Xi Jinping's appointment as China's leader in 2013, the United States took a generally *laissez-faire* view of China's military modernization, nuclear and otherwise, given low expectations of direct armed hostilities in the foreseeable future, the gross disparity in standing military capabilities, and the desire to improve political relations.

But the logic of the US "answer" in the new era of strategic competition is so far undeveloped. As Secretary of State Antony Blinken argued in March 2021 about the bilateral relationship generally, "our relationship with China will be competitive when it should be, collaborative when it can be, and adversarial when it must be. The common denominator is the need to engage China from a position of strength."[6] Where does the nuclear piece fit in this puzzle? What is the strength required of the United States in the nuclear domain to achieve its purposes? What are those purposes?

China's progress in developing the strategic military relationship with the United States that it deems necessary and appropriate compels US officials and experts to revisit the difficult mutual vulnerability question. It is more important than ever that the United States has its own settled views of what is necessary, appropriate, and possible. Absent a clearer answer to whether it accepts or rejects mutual vulnerability, the United States will continue to fall prey to worst-casing in Beijing, growing anxiety in allied capitals, and ill-conceived initiatives of various kinds that lack an over-arching strategic logic. A clear answer is also necessary to guide the development of competitive strategies that are effective in advancing US interests. Without such clarity, a substantially more adversarial nuclear relationship is likely. Opportunities for collaboration to reduce shared nuclear risks may also be missed.

"Absent a clearer answer to whether it accepts or rejects mutual vulnerability, the United States will continue to fall prey to worst-casing in Beijing, growing anxiety in allied capitals, and ill-conceived initiatives of various kinds that lack an over-arching strategic logic."

To help stimulate new thinking on the necessary answers to these questions, this chapter proceeds as follows. It begins with an analysis of the new strategic context, as reflected in the shift from bilateral nuclear disengagement (for roughly 25 years after the end of the Cold War) to the new era of strategic competition. This context helps to explain why the answer to China's question has become even more difficult for the United States. The chapter moves on to defining the main elements of a US strategy aimed at managing nuclear competition. It then revisits the mutual vulnerability subject as an integral element of the management strategy. It concludes that mutual vulnerability is inescapable and should be acknowledged and accepted by the United States, but in a manner designed to reduce the costs and risks attendant to the new approach.[7]

[4] Brad Roberts (ed.), *Taking Stock: US-China Track 1.5 Nuclear Dialogue* (Livermore, CA: Center for Global Security Research, 2020)

[5] Setting out the Obama administration's China policy on October 5, 2009, Deputy Secretary of State James Steinberg called for "strategic reassurance" on both sides of the Pacific and for "a core, if tacit, bargain" with China. For an analysis of reassurance and its results, see John Pomfret, "America vs. China: a competitive face-off between two Pacific powers," *Washington Post,* November 18, 2016.

[6] "A Foreign Policy for the American People," Antony J. Blinken, Secretary of State, March 3, 2021.

[7] The author benefited from remarks on earlier drafts of this chapter by Bridge Colby, Ralph Cossa, Lewis Dunn, Robert Einhorn, Vincent Manzo, George Perkovich, David Santoro, Robert Soofer, Sugio Takahashi, and John Warden. But he alone is responsible for the arguments presented here. These are his personal views and should not be attributed to his employer or its sponsors.

The New Policy Context

The new context is defined in part by China's dramatic break with past practice in the development of its nuclear posture. That break is defined in part by the dramatic acceleration of growth in the size of the force that became evident in 2021. It is also defined by the diversification of Chinese nuclear forces with the move to a triad and deployment of theater-range dual-capable missile systems, by the apparent interest in a launch-on-warning posture, and by the apparent role of China's Strategic Rocket Force in supporting a strategy to "fight and win wars against a strong enemy." [8] In the prior context, China's capacity for nuclear retaliation was not assured. Today, China's leaders can be much more confident. By 2030, that capacity will be quite robust.[9] In the prior context, China's capacity to try to manage escalation through limited nuclear strikes was non-existent. Today, its emerging theater forces give it some new options. By 2030, that capacity could be quite robust. China is well on the path to emerging as a nuclear near-peer of the United States, both qualitatively (with a triad plus regional systems) and quantitatively (a comparably sized stockpile of warheads, both deployed and non-deployed, may be a decade or more away but a deployed force structure of roughly comparable dimensions will come sooner).[10]

Changes in the nuclear context are only part of the new context. China's capacity to exploit cyber space and outer space for military purposes is well developed and continues to improve. The same can be said for its capacity to undertake military action in neighboring maritime environments with general purpose military forces.

The geopolitical context has also changed. In the prior era, US policymakers were concerned about possible military flashpoints with China but did not see a major clash over Taiwan or otherwise as a significant near-term possibility. They also saw Chinese leaders as generally risk averse (at least insofar as armed conflict with the United States or its allies was concerned). In the current era, the risk of war is seen as rising and more proximate. Moreover, China's leaders have defined a virtually zero-sum approach to US alliances, the US regional role, and the future of the Indo-Pacific security order, while adding a layer of ideological competition with the United States and pursuing a new and different global order with China in a central and dominant place. [11] In addition, China's many neighbors, along with the United States, are the victims of attempted economic, political, and occasionally military coercion by China in its efforts to subdue its enemies without fighting.

An additional and often neglected feature of this new strategic landscape is the tripolar strategic relationship that involves Russia. In the old context, Russia and China were separable problems in US defense strategy. The United States pursued a tailored nuclear approach for each, but with a primary focus on Russia. In the new context, the United States has to worry about cooperation between the two in time of crisis and war, and about opportunistic aggression by the rival with which it is not then engaged. Yet its conventional posture is sufficient for only a single major war. Its strategic posture is also tailored for the era now gone by. Its missile defense and conventional strike capabilities are tailored for the "rogue state" challenge. [12] Its extended nuclear deterrent was radically reduced in the 1990s (with the removal of 97 percent of its weapons from Europe and 100 percent from Asia) and has not subsequently been adapted. It now faces two near-peers with the military means to fight only one major war and thus also the new problem of opportunistic aggression in the other theater in time of crisis and war.[13]

These factors combine to add a great deal of complexity to a US-China nuclear relationship that was, heretofore, quite simple in character. In the prior era, that relationship barely existed, as leaders in both countries endeavored to keep nuclear weapons in the political background; today, nuclear weapons are moving into the foreground as the relationship

[8] *Military and Security Developments Involving the People's Republic of China, 2021,* Annual Report to the Congress, Office of the Secretary of Defense, 2021.

[9] Ibid. See also *Annual Threat Assessment of the US Intelligence Community,* Office of the Director of National Intelligence, April 9, 2021.

[10] For a discussion of factors shaping the future of China's nuclear force, see "China's Nuclear Forces: Moving Beyond a Minimal Deterrent" in the *2021 Report to Congress of the US-China Economic and Security Review Commission,* November 2021, pp. 340-386.

[11] While this approach is now unmistakable, recent scholarly work explains that it has long shaped the contours of China's strategic thinking. See Rush Doshi, *The Long Game: China's Grand Strategy to Displace American Order* (Oxford: Oxford University Press, 2021) and Timothy Heath et al., *China's Quest for Global Primacy: An Analyses of Chinese International and Defense Strategies to Outcompete the United States* (Santa Monica, CA: RAND, 2021).

[12] Linton F. Brooks, "The Tripolar Strategic Balance in 2030" in Brad Roberts (ed.) *Fit for Purpose? The US Strategic Posture in 2030 and Beyond* (Livermore, CA: Center for Global Security Research, 2020), pp. 90-96. See also Brad Roberts, *Tripolar Stability: The Future of Nuclear Relations Among the United States, Russia, and China* (Alexandria, VA: Institute for Defense Analyses, 2002).

[13] Jim Mitre, "A Eulogy for the Two-War Construct," *Washington Quarterly*, vol. 41, no. 4, Winter 2019, pp. 7-30.

becomes more adversarial. In the prior era, there were no signs of competition, as the United States adapted its deterrent (in line with its rejection of mutual vulnerability with "rogue states") and largely ignored developments in China's nuclear posture, while China modernized its nuclear forces and began to tailor modernization (in line with its desire for assured retaliation). In this sense, strategic decision-making in the two capitals was at most "loosely coupled." Today, tighter coupling is evident as leaders in both capitals make force planning decisions based on a calculus of the potential reactions by the other and of potential impacts on bilateral nuclear/strategic stability. The foundations for a future arms competition are well set if one chooses to compete for some new military advantage and the other opts to try and deny that gain. In the prior era, there was some hope, at least in the United States, that the two could cooperate to identify and reduce unwanted nuclear risks; today, the urgency of doing so is rising but the expectation of success is declining.

"In calibrating the place of the nuclear piece in the competition puzzle, it is important also not to overstate the competitive dimensions of the nuclear relationship. It is an odd competition when one party competes, but the other does not. In recent years, China has moved steadily toward a more competitive nuclear strategy while the United States has not."

In calibrating the place of the nuclear piece in the competition puzzle, it is important also not to overstate the competitive dimensions of the nuclear relationship. It is an odd competition when one party competes, but the other does not. In recent years, China has moved steadily toward a more competitive nuclear strategy while the United States has not. So far at least, the United States has been reluctant to join the competition. This has something to do with the very unequal nuclear postures of the two for so many decades and with the considerable distance China has yet to go to emerge as a quantitative peer. It also has something to do with the reluctance to be drawn into an arms race following the exorbitant costs and risks of the US-Soviet arms race. It also has something to do with the heavy focus on Russia in the US nuclear policy community and the novelty of the new policy issues in the US-China nuclear relationship.

An additional key feature of the emerging US-China nuclear relationship is the uncertainty attached to the strategic intentions of the competitors. Xi Jinping has made a few public statements. In 2016, he promised "a great rise in strategic capabilities."[14] In 2017, he promised "breakthroughs…in strategic deterrence capability."[15] In 2020, he spoke of China's emergence by 2049 as "a leader in terms of composite national strength and national influence…at the center of the world stage," where it will have "the dominant position."[16] In 2021, he reported his decision to pursue the "accelerated development" of "an advanced strategic deterrent," as already noted above.

This leaves some basic questions unanswered: Why? Why now? Why the rush? Has Xi opted for the long-anticipated "sprint to parity" long feared by US policymakers?[17] As there is no evidence that China's leaders are motivated by a vision of numerical parity with the United States, what is the nuclear relationship they seek with a country they see as both dangerous and in decline? Setting aside questions about the nuclear relationship with the United States, what is their vision of China's future place in the global military landscape, nuclear and otherwise? China is competing aggressively but hasn't been clear about what it's competing for in the nuclear domain and how it (and we) will know when and if it arrives at its intended destination. Answers to these questions may be secrets; or they may be mysteries

[14] As discussed in *China Military Power: Modernizing a Force to Fight and Win* (Washington, DC: Defense Intelligence Agency, 2019).
[15] Ibid.
[16] As discussed in *Military And Security Developments Involving the People's Republic of China, 2020,* chapter one.
[17] US Secretary of Defense Donald Rumsfeld coined the phrase in 2002 in a testimony before the Senate Foreign Relations Committee as the United States considered ratification of the Strategic Offensive Reductions Treaty. Rumsfeld argued that the forces allowed under the treaty were sufficient to ensure the United States would have the means to disincentivize a possible sprint to parity by China.

for now, meaning that even China's key decision-makers do not have good answers.

In contrast, the United States has no such plans for the accelerated development of an advanced strategic deterrent, as it remains focused on reducing the role of nuclear weapons, stewardship of a much-reduced version of the nuclear stockpile it froze in place in 1990, and a homeland missile defense posture that can defeat North Korean missile attack. It has no clear vision of the strategic military relationship with China that best suits its interests. It is reluctant to compete because it wishes to avoid the risks and costs of doing so. It is hardly surprising, then, that it remains undecided about whether it should somehow compete to try to escape a relationship mutual nuclear vulnerability.

In sum, the context has changed in some fundamental ways, adding both complexity and urgency to the search for an answer to the mutual vulnerability question. That answer should follow from an understanding of the strategy now needed to manage US-China strategic competition.

Managing Competition

In this new era of strategic competition, the US-China nuclear relationship requires management in a way it did not previously. There are new dangers to be avoided and, hopefully, new opportunities to seize. How should the United States and its allies think about the necessary balance among the competitive, collaborative, and adversarial aspects of the relationship? What is the strength needed for effective engagement of China in the nuclear domain? Complete answers to these questions are beyond the scope of this paper. Instead, the focus here is on key principles that should guide the US approach.

First, do no harm. This comes first because harm is easily done. The competitive, collaborative, and adversarial aspects all require tending and an emphasis on one at the expense of the others could produce unhelpful reactions from Beijing. This is so in part because of the filter in Beijing through which US strategic messages pass—a filter that tends to interpret US messages of restraint as signals of US decline and retreat and US messages of resolves as signals of US bullying.[18]

Second, seek US-China dialogue about the strategic military relationship, nuclear and otherwise, that is substantive, sustained, and at a sufficiently high level to engage real decision makers. Such dialogue is essential to the better understanding of the nature of strategic competition, its risks, and the necessary measures, both unilateral and joint, for reducing shared, unwanted risks. Such dialogue is also essential to advance the shared interest in avoiding armed conflict resulting from accident, misperception, or miscalculation. These goals are best accomplished with a mix of official and unofficial dialogue, preferably unfolding in tandem, with unofficial dialogue probing a bit further ahead, thereby hopefully both set an agenda for official dialogue and inform it.[19]

Third, don't wait on dialogue to produce meaningful change in China's political and military trajectory—get on with the rest of the agenda while engaged in dialogue. There is a natural tendency to hope that dialogue will produce breakthroughs that will help to avoid intensifying competition and thus defer the difficult choices that come with it. Dialogue may produce some breakthroughs. But it has not done so for the past 30 years, and Xi seems set on his course.

Fourth, engage allies as if they are critical to effective long-term competition—because they are. The future alignment of US allies is one of the prizes for which China competes, and in crisis and war they would likely be among the first victims of Chinese military operations. Moreover, they have something meaningful to contribute to deterrence and defense, as well as particular vulnerabilities to address. Allies and partners should be thought of as co-deterrers and co-competitors who should be engaged in campaigns to strengthen deterrence (and to understand its new requirements). Their steadiness of purpose is one of the central conditions for success in the long-term strategy to nudge China towards a more cooperative relationship with its neighbors.

Fifth, set out a clear vision of the exit strategy from strategic competition. The United States and its allies and partners need a credible set of arguments about how the conditions they work to create through competition help to lay the foundations for a future improvement in political relationship and easing of competition. Their case cannot be built on the expectation of regime change, which would not improve Beijing's intention to cooperate. The exit

[18] As discussed in Roberts, *Taking Stock*.

[19] Ibid.

strategy should include efforts to mitigate nuclear and other risks that the two could begin to address jointly when they come to the point of seeing mutual benefit in doing so, including the political benefit that flows from cooperative technical measures.[20] Such measures will be helpful even if they do not facilitate an early exit from competition, by making it less dangerous.

Finally, compete with China's newly more competitive approach—but on our terms, not China's. China's terms are rapid build-up of its forces, both qualitative and quantitative. The United States starts from a position of quantitative and qualitative strength. To compete on these terms would entail trying to recover and maintain the status quo ante (that is, nuclear supremacy over China).

The United States has not defined its own terms. In my view, the United States should compete for three objectives:

- To maintain the credibility of its long-standing deterrence strategy (by being able to put at risk those assets that China's leaders value most, despite force growth and possible future Chinese missile defenses);
- To ensure that the extended nuclear deterrence protection it provides its allies is credible and effective in the context of China's improving regional nuclear forces (official US sources have generally so far attributed to the regional US nuclear "umbrella" a role in deterring North Korea); and
- To ensure that it will not be caught flat-footed if China's force continues to grow in the next decade beyond parity with the United States (with the hope that this will have a dissuasive effect on such a Chinese ambition).

While it competes in these ways and pursues strategic dialogue, the United States should also practice those forms of unilateral nuclear restraint it considers necessary and appropriate, as for example in the realm of underground nuclear testing, where the United States continues to abide by its test moratorium.

These key principles suggest an answer to the question about the strength that is necessary to enable US strategy. That strength is both military and political. Militarily, the United States must be able to demonstrate to Beijing that it retains the capability, despite significant advances in China's strategic deterrent, to defend its interests and its allies and partners. This does not require tit-for-tat force developments; it requires forces aligned with our theory of victory across the continuum of conflict.[21] Politically, the strategy must affirm that the United States has the resolve to defend its interests and allies and partners, despite the new risks that China is now capable of imposing. A more competitive US response to China's accelerated development of an advanced strategic deterrent ought to be helpful in dispelling any misperceptions that may exist in Beijing about US capability and resolve.

How does mutual vulnerability fit into this strategy?

Mutual Vulnerability Revisited

Uncertainty about US strategic intent casts a long shadow over these six key principles. Without clarity about the nature of the strategic military relationship with China that it seeks, the United States cannot know what it means to compete on US terms and cannot advance strategic dialogue with China. Indecision inevitably generates mixed messages to China and to US allies and partners.

What kind of strategic military relationship with China should the United States want?[22] It should want a relationship that is becoming more stable, not less; with nuclear risks that are falling, not rising; and in which adversarial military aspects are managed in a way that they do not gain a prominent place on the bilateral political agenda. It should want a relationship in which mutual vulnerability does not matter.

[20] Brad Roberts (ed.), *Major Power Rivalry and Nuclear Risk Reduction: Perspectives from Russia, China, and the United States* (Livermore, CA: Center for Global Security Research, 2020).

[21] For key insights into the 2018 National Defense Strategy on this topic, see Elbridge A. Colby, "A Strategy of Denial," War on the Rocks, October 22, 2021. For more context, see Colby, *The Strategy of Denial: American Defense in an Age of Great Power Conflict* (New Haven, CT: Yale University Press, 2021). For a general discussion of theories of victory, see Brad Roberts, *Theories of Victory, Red and Blue*, Livermore Paper No. 9 (Livermore, CA: Center for Global Security Research, 2021).

[22] Brad Roberts, *China-US Nuclear Relations: What Relationship Best Serves US Interests?* (Alexandria, VA: Institute for Defense Analyses, 2002).

What kind of relationship can the United States have with China? In this new era, it cannot have the relationship it wants because this is the relationship China has rejected. Nor can it escape mutual vulnerability. The technology to blunt China's capabilities for assured retaliation does not exist. Even if some means were found to intercept any, and all, ballistic missiles China might launch toward the United States, Beijing would have a myriad of other means to inflict grievous damage onto the US homeland. These include, but are not limited to, the delivery of nuclear weapons by non-ballistic missiles, albeit less promptly than would otherwise be the case.

Accordingly, the United States is going to have a relationship of mutual vulnerability, whether or not it accepts it in a political sense. It should accommodate this fact, just as it reluctantly came to terms with mutual assured destruction with the Soviet Union during the Cold War. The United States can aspire to "stay ahead" of "rogue state" ballistic missile threats; but it cannot aspire to negate the strategic deterrents of major-power rivals endowed with significant military and technical prowess. Moreover, the United States must acknowledge its own interest in reducing the pressures that China might feel in crisis to "go first"—that is, to employ its nuclear-tipped missiles against US and allied targets before the United States destroys enough of them that its missile defense can defeat the rest. China's confidence in its no-first-use strategy has been in growing doubt for precisely this contingency.[23] These judgments imply that the United States should go beyond tacit acknowledgement of mutual vulnerability to political acceptance.

These judgments do not imply that the United States should refrain from a more competitive response to China's advancing strategic deterrent—quite the contrary. As argued above, that response requires clarity about what the United States is competing for.

What does this mean in practice for the future design of US strategic capabilities? From a quantitative perspective, the United States should compete not for supremacy but to maintain a "second-to-none" posture—the principle that guided its nuclear competition with the Soviet Union once mutual vulnerability was accepted with the ABM Treaty. From a qualitative perspective, it should ensure that it has the means to put at risk those assets most valued by China's leaders, but not pursue prompt long-range conventional strikes forces and homeland missile defenses of a scale and character that, in combination, would deprive China of assured retaliation. It should also ensure that its extended nuclear deterrent can threaten to impose unacceptable costs on China at key escalation thresholds China might consider crossing.

"The United States can aspire to 'stay ahead' of 'rogue state' ballistic missile threats; but it cannot aspire to negate the strategic deterrents of major-power rivals endowed with significant military and technical prowess."

What would be the benefits, costs, and risks of accepting mutual vulnerability? They depend in part how such acceptance occurs. From my perspective, a simple public statement by the US president would tip the balance of benefits, costs, and risks unhelpfully, not least by suggesting that the commitment would be as perishable as any given presidency. A preferable approach would be for mutual understanding to emerge in the context of sustained, substantive, and high-level dialogue, as supported by the necessary consultations with allied capitals and allies on Capitol Hill.

The primary potential benefit of this course of action is for the United States and its allies and partners: an answer to the question that is central to the strategy for competition.

There may also be a benefit in the reassurance of China, which has long sought this answer. But we must recognize that this potential reassurance has declined over the years—substantially so. At the time of US withdrawal from the Anti-Ballistic Missile Treaty in 2001, a clear answer to China's basic question might have had some value in attenuating Chinese concerns about US strategic intentions and its supposed search for "absolute security" at China's expense—especially if following administrations had

[23] Joseph Kahn, "Chinese General Threatens Use of A-Bombs if US Intrudes," *New York Times*, July 15, 2005 and Wu Riqiang, "Certainty and Uncertainty: Nuclear Strategy with Chinese Characteristics," *Journal of Strategic Studies*, vol. 36, no. 4, 2013, pp. 579-614. See also Roberts, *Taking Stock*.

echoed this theme.[24] Today, US reassurances have little credibility in Beijing.[25] Moreover, China's current generation of leaders has well-formed ideas about US strategic intentions and invested heavily in what they judge to be the necessary responses. One Chinese non-governmental analyst, Tong Zhao, has argued that US acceptance of mutual vulnerability would "help to defuse the emerging arms race" by stabilizing the competition and signaling that the United States is "willing to accept peaceful coexistence and to refrain from challenging China's core interests," which in turn would lead Beijing "to act more proactively to cooperate with Washington."[26] I wish that it were so, but I am skeptical. Xi has urged his compatriots "to grasp clearly the grand trend that the East is rising while the West is declining," arguing that "there is a vivid contrast between the order of China and the chaos of the West."[27] As the editor of China's *Global Times* has argued in explaining China's nuclear build up:

> China's security situation is changing rapidly. The US has the strategic ambition to subdue China. Once a military confrontation between China and the US over the Taiwan question breaks out, if China has enough nuclear capacity to deter the US, that will serve as the foundation of national will. We are facing different environments and risks from the past. The calculation methods for the minimum level must also be different. Regardless of what the US says, China must be sober and firm about what it should do.[28]

A China that is "sober and firm" (in the manner intended by the author) is unlikely to be motivated to defuse an emerging arms race and to cooperate with Washington.

While the potential reassurance values have declined, they have not entirely disappeared. There is a successor generation to be mindful of, as well as other interested stakeholders in East Asia and elsewhere. A point may also arrive when China's current leaders discover that a beneficial arms race is easier imagined than managed, thereby opening new possibilities for cooperation.

The potential costs are not inconsequential. One is the cost to the assurance of US allies. Japanese experts have long been concerned that the acceptance of mutual vulnerability by the United States would only encourage Chinese military adventurism, by signaling that Washington would expect to be deterred in an escalating conflict. Those experts have invoked the "stability-instability paradox" to argue that the ostensible stabilizing benefits of mutual vulnerability at the strategic level would be offset by new forms of instability at the regional level, as China is emboldened to test the limits of resolve and capability of its neighbors.[29] These are well-founded concerns. But they also represent a longing for days gone by. Some Japanese experts have begun to recognize that China's success in achieving assured retaliation cannot be rolled back, and thus they need to partner with their US counterparts to better understand the requirements of strategic stability in the new era.[30] Such collaborations may reduce the costs to Japan's assurance of any US political acceptance of mutual vulnerability. Dialogue with China on these matters should proceed in parallel with sustained, substantive, and high-level dialogue with Japan.

The other significant potential cost is domestic political. At this time, following revelations about the size and scale of China's new nuclear ambitions, any shift in US policy would be widely criticized as a form of capitulation coerced from the United States by militarists in Beijing. It may be possible to reduce this cost, however. Washington must be seen to be getting something substantial from Beijing in exchange. This is more likely if new thinking about mutual vulnerability is embedded in a more comprehensive effort to take stock of the fundamentals of the US-China strategic military relationship, and to develop a focused, coherent approach that balances the competitive, cooperative, and adversarial aspects of that relationship. The Biden administration should also build on existing bipartisan elements of its China policy to build consensus about next steps.[31]

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[24] Roberts, *China-US Nuclear Relations*.
[25] Wu, "China's Anxiety About US Missile Defence."
[26] Tong Zhao, "We Need to Pay Attention to China's Buildup," *New York Times*, November 15, 2021.
[27] "'The East is Rising': Xi Maps Out China's Post-Covid Ascent," *New York Times*, March 3, 2021.
[28] Editorial, "China's Nuclear Deterrence Buildup Cannot Be Tied Down," *Global Times*, July 2, 2021.
[29] As discussed in Brad Roberts, *Extended Deterrence and Strategic Stability in Northeast Asia* (Tokyo: National Institute for Defense Studies, 2013).
[30] Insights gained from unofficial Track-1.5 and Track-2 dialogues in 2020 and 2021.
[31] One innovative idea for doing so is to reconstitute the bipartisan Strategic Posture Commission as a standing body charged with offering advice and recommendations to the Congress in follow up to each future Nuclear Posture Review. See the *2021 Report to Congress of the US-China Economic and Security Review Commission*.

The most significant potential risk associated with US political acceptance of mutual vulnerability is that it might encourage risk-taking military assertiveness by Beijing. Sugio Takahashi of Japan's National Institute for Defense Studies has formulated the issue as follows: With the ABM Treaty, the United States politically accepted mutual vulnerability with the Soviet Union; what followed was a decade of Soviet build-up of its strategic and theater forces, Soviet military adventurism in Afghanistan and elsewhere, and new forms of nuclear coercion of the Atlantic Alliance. In Takahashi's analysis, these factors combined to create a crisis in transatlantic relations, as allies in Europe sought new forms of nuclear protection at the regional level. Hence the Euro-missile crisis. The story came to a happy conclusion with the conclusion of the Intermediate-Range Nuclear Forces Treaty for largely serendipitous reasons associated with Mikhail Gorbachev's selection as Soviet leader and his willingness to tackle the economic and political crisis then confronting Soviet communism. Takahashi asks whether the United States, Japan, and others are prepared for an analogous period of tension and crisis in its trans-pacific alliances and aren't betting unwisely on serendipitous developments in China's governance system that seem quite unlikely.[32]

But this problem is likely coming whether or not the United States formally accepts mutual vulnerability. China has expanding interests and improving means for power projection. Its ambitions to re-make the regional order are unmistakable. Its leaders have formed clear views about a dangerous America that they deem to be in decline and retreat.[33] They also seem increasingly inclined to risk taking.[34]

The central question, then, is whether political acceptance of mutual vulnerability makes this problem worse. It might—if the United States fails to do anything to mitigate the risk. Arguably, acceptance might make this problem better—if it is part of a strategy to compete on our terms to maintain credible deterrence, extended deterrence, and assurance. That strategy would be the risk mitigation measure—as a tangible demonstration of US and allied resolve to defend our interests if attacked.

In sum, there is a substantial potential benefit to the United States of the political acceptance of mutual vulnerability as an enabler of stabilizing competition. The long-presumed benefit of reassurance of China has declined in potential value. The potential costs are substantial but can be reduced. The potential risk is also substantial but can be mitigated in multiple ways.[35] Those mitigation efforts may have benefits of their own in risk reduction.

Conclusions

To manage the US-China nuclear relationship in an era of strategic competition, the United States needs a comprehensive approach that balances the competitive, cooperative, and adversarial aspects of that relationship. To be effective, that strategy requires clarity about US strategic intent. That, in turn, requires clarity about the nature of the strategic military relationship the United States wants, can have, and must accept with China. The United States cannot now have what it wants—a stable and improving nuclear relationship. It must accept something it has long found well outside its comfort zone—mutual vulnerability. To advance its interests and those of its allies and partners, this is a more promising approach than rejecting mutual vulnerability or continued indecision. How it best does so is a significant question, as it must be in a manner that reduces expected costs and mitigates potential risks. Dialogue aplenty is required—with allies and partners, with Capitol Hill, and with Beijing—both before and after any decision to proceed in this direction.

[32] Sugio Takahashi, "Strategic Stability and the Impact of China's Modernizing Strategic Strike Forces" in James M. Smith and Paul T. Bolt (eds.), *China's Strategic Arsenal: Worldview, Doctrine, and Systems* (Washington, DC: Georgetown University Press, 2021), pp. 63-92.

[33] Xi Jinping has argued that "the East is rising and the West is declining" and that "the United States is the biggest threat to our country's development and security." Chris Buckley, "'The East is Rising': Xi Maps Out China's Post-COVID Ascent," *New York Times*, March 3, 2021.

[34] See Eric Chan, "The End of Strategic Ambiguity in the Taiwan Strait," *The Diplomat*, September 13, 2020 for a discussion of an article that appeared in 2019 in the official journal of the Chinese Communist Party. Entitled "Taking Strategic Initiative to Prevent and Defuse Major Risks," it urged the party to "fight good offensive battles" and "take the initiative in the struggle." The article was authored by Chen Yixin, described by Chan as "Xi's protégé, troubleshooter, and likely successor."

[35] See Lewis Dunn, "If the United States Acknowledges Mutual Vulnerability: How Does it Do It—and Get Something?" in this volume.

3

Questioning the Assumptions of Declaring Mutual Vulnerability with China

Matthew R. Costlow

Should the United States, the essential defender of the liberal international order, make a declaration acknowledging its vulnerability to the greatest rising threat to that order, China? Supporters and critics alike could provide an answer at the level of national policy, defense strategy, or diplomacy. While confining the answer to the question at any one of those levels would make for a tidy academic exercise, it would not provide the full picture of the potential costs and benefits. Instead, this chapter takes a different approach: questioning the assumptions behind the arguments for a declaration of mutual vulnerability. I focus on three assumptions that form the foundation of proponents' arguments for a declaration of mutual vulnerability and find that since these assumptions are defective, the structure of mutual vulnerability is unlikely to stand.

First, the assumption that the United States and China can or will agree to a mutually acceptable definition *and* understanding of mutual vulnerability is questionable. Second, even if both sides accomplish the first task, the assumption that such a declaration will produce the benefits that supporters claim is doubtful. Third, in the improbable event that the first and second assumptions prove correct, the assumption that the benefits will outweigh the costs of such a declaration is remote. In short, the unlikely and at best marginal potential benefits of the United States declaring its vulnerability to the Chinese nuclear arsenal are outweighed by the far more likely and substantial costs that may result.

First Assumption: Defining and Understanding Mutual Vulnerability

Proponents often state that a US-Chinese declaration of mutual vulnerability would acknowledge reality, but they never answer the question: "Whose reality?" Despite nearly twenty years of analysts discussing the prospect of the United States declaring mutual vulnerability with China, they have written scandalously little on what "mutual vulnerability" consists of, much less how officials in Washington and Beijing will likely arrive at different understandings of the concept.[1] Simply put, the lack of a common definition of mutual vulnerability allows the words to accommodate a range of force structures and policies that one state's leadership may believe is allowable according to *their* understanding, but which the other state would view as violating *their* understanding of mutual vulnerability. Defining mutual vulnerability is only half the battle, the other half is shared understanding. Analysts must identify the conditions between states that constitute "vulnerability." The Anti-Ballistic Missile (ABM) Treaty between the United States and the Soviet Union was the manifestation of the (at least publicly stated) official position of both governments that it was in their best interests to restrict missile defense interceptors so that each side would ultimately be vulnerable to the other's nuclear forces. Notice the wording "ultimately"—the Soviet Union deployed the full 100 missile defense interceptors allowed by the treaty. In theory, the Soviets could intercept some fraction of the US warheads targeted on Moscow, but ultimately the Soviet ABM system could not defend against an all-out attack. Soviet vulnerability in this case was certain, but not complete.

Does China desire a US declaration of its *ultimate* vulnerability (i.e., susceptible to broad societal damage after interceptors are depleted) or *complete* vulnerability (i.e., the United States has no defenses, even against a limited attack)? China is building its own homeland missile defense that appears directed toward the United States, so if one were to take seriously their repeated entreaties for a declaration of mutual vulnerability, then perhaps Chinese officials believe some level of missile defenses are acceptable under conditions of mutual vulnerability. Both the United States and China would be *ultimately* vulnerable in the face of a mass attack.[2]

The obvious question, then, is how much damage to the United States would satisfy Chinese leaders?[3] In other words, assuming that both sides are allowed some homeland missile defenses in a state of (ultimate) mutual vulnerability, how many Chinese warheads will need to penetrate US missile defenses to inflict the desired level of damage so that Chinese leaders can be satisfied that the United States is vulnerable? If 10 Chinese nuclear warheads can

[1] For an early discussion of this concept as it relates to China, see Brad Roberts, *China-U.S. Nuclear Relations: What Relationship Best Serves US Interests?* (Washington, DC: Institute for Defense Analyses, 2001).

[2] On China's homeland missile defense plans, see US Department of Defense, "Chinese and Russian Missile Defense: Strategies and Capabilities," *Defense.gov*, July 28, 2020, and David Reid, "Russia is helping China to build a missile defense system, Putin says," *CNBC*, October 4, 2019.

[3] For an excellent earlier analysis of this question from a Japanese perspective, see Sugio Takahashi, "Redefining Strategic Stability: A Japanese View" in James L. Schoff and Li Bin, *A Precarious Triangle: US-China Strategic Stability and Japan* (Washington, DC: Carnegie Endowment for International Peace, 2017), pp. 49-50.

detonate over the 10 most populated US cities, will China view that condition as one of ultimate US vulnerability? 20 cities? 50 cities? 100 cities? Or will China's far larger projected nuclear force in 2030 shift its targeting priorities from countervalue "city-busting" to counterforce, in which China could (notionally) perceive the need to be able to destroy 50 percent of US military installations that support US forces in the Indo-Pacific?[4]

An even more fundamental question that China has yet to answer officially is whether a certain number of Chinese nuclear warheads need to reach US targets before or after the worst-case scenario—a massive US first strike? That is, is mutual vulnerability a condition that must exist before a massive first strike, or both before and after? If the latter, then US homeland missile defenses would not be the only potential systems that China would deem dangerous to the functioning of mutual vulnerability—long-range US nuclear-armed missiles could also be employed to degrade the Chinese ability to keep the US homeland vulnerable.

This bears repeating: one of the core roles for US nuclear weapons, with bipartisan historical support, is damage limitation in case deterrence fails—the ability to reduce US losses to its population, economy, or military forces.[5] Taken to its logical conclusion—a course China may choose—adherence to "mutual vulnerability" might require the United States to restrict one of its primary roles for nuclear weapons, not just missile defenses. Accepting an undefined, poorly defined, or poorly understood concept of mutual vulnerability would only invite Chinese diplomats to attack US damage limiting capabilities—both missile defense and what they deem "excess" nuclear offensive weapons.

A further complicating factor in defining and understanding "mutual vulnerability" is that not only is vulnerability in the eye of the beholder, but each state also has the major incentive to define itself as vulnerable at the lowest level of damage possible. For instance, it is in US interests to say it is ultimately vulnerable to a devastating attack if only one Chinese warhead can destroy one American city. So, China should be satisfied with being able to ultimately destroy just one American city in the face of US missile defenses, and additional Chinese forces beyond this criterion would signal China wishes to escape the mutual vulnerability condition. At the same time, Chinese officials would be incentivized to maximize their assured damage capability against the United States, arguing that they must be confident that they could destroy the top 100 most populous US cities, large swathes of the US military, and all command-and-control assets. Then, and only then, would they be convinced that the United States was ultimately vulnerable.

"A further complicating factor in defining and understanding 'mutual vulnerability' is that not only is vulnerability in the eye of the beholder, but each state also has the major incentive to define itself as vulnerable at the lowest level of damage possible."

The phrase "mutual vulnerability" can therefore only obtain some rational (if artificial) meaning when US and Chinese officials answer the question: "Vulnerable to what?" The trick, of course, is that attempting to answer the question will only yield more questions that China has so far yet to listen to in official dialogue, much less begin to answer. Moreover, neither the United States nor China should (or likely will) be willing to answer the question because doing so will give the other side a rhetorical cudgel to attack whichever opponent's systems it believes places mutual vulnerability at risk.

Finally, even if both sides officially agree to declare their mutual vulnerability (however defined or understood), the Cold War record shows that announcing one's vulnerability is not sufficient to cause both sides to act on the announcement. The inherently unverifiable nature of such a declaration, plus the understandable incentives to limit damage once war begins, likely makes a mutual vulnerability

[4] US Department of Defense, *Military and Security Developments Involving the People's Republic of China* (Washington, DC: Department of Defense, 2021), p. 90.

[5] For sources on the longstanding bipartisan history of the role of damage limitation in the US nuclear arsenal, see National Institute for Public Policy, *Section VI. Minimum Deterrence and Damage Limitation* (Fairfax, VA: National Institute for Public Policy, 2014), pp. 22-46.

declaration a policy-in-name only. Both the Soviet Union and the United States repeatedly declared their commitment to keeping their forces protected and their people unprotected, and yet both sought (non-missile defense) ways of limiting their vulnerability through damage limitation capabilities: counterforce nuclear weapons, civil defense, and air defense.[6] Simply put, acknowledging vulnerability is not the same as accepting vulnerability.

Many of the preceding points on the difficulties likely to accompany an effort to declare mutual vulnerability could be clarified by Chinese officials in a Track-1 dialogue. Yet, therein lies the dilemma. Chinese officials have premised dialogue on the United States declaring itself vulnerable to China, but the United States requires dialogue to understand what China means by "vulnerable." Declaring "mutual vulnerability" is decidedly not about "recognizing reality." Instead, it is recognizing that reality is what the state makes of it. The United States does not know what "vulnerable" means to China and may not agree with its understanding, should Beijing ever explain it. If China continues refusing to explain its thinking on a concept it claims to be so foundational to its relationship with the United States, then perhaps that is indicative of Chinese intentions.

Second Assumption: The Likelihood of Benefits

It is difficult to evaluate proponents' claims that a declaration of mutual vulnerability could produce certain benefits for the US-China relationship since there is no real historical parallel within that relationship to examine. Still, policymakers considering a declaration of mutual vulnerability must weigh the potential gains examined in this section against the potential costs examined in the next section, and then judge the relative likelihood of each.

Proponents of a declaration of mutual vulnerability cite several potential benefits for the United States. For example, some analysts among a prominent group of scholars and former officials concluded that the United States "would stand a better chance of engaging Beijing in a dialogue on nuclear issues, encouraging China to be transparent about its capabilities, and ultimately stanching the growth and development of China's strategic forces if it formally acknowledges mutual vulnerability and seeks to credibly allay Beijing's fear that Washington is trying to break out of this condition."[7] Others emphasize the purported negative effects of Washington continuing to refuse to declare mutual vulnerability, namely, implying to Chinese planners that the United States could still pursue a splendid first strike capability against China, which in turn causes Beijing to adopt a more "ambitious" nuclear policy, and the nuclear arsenal to match it.[8] So, most of the potential benefits of adopting a policy of mutual vulnerability, according to proponents, can be categorized as inducing dialogue, increasing transparency, and reducing tensions, all of which are supposed to place brakes on the Chinese nuclear buildup, either through arms control or unilateral actions on China's part.

It is unclear, however, that a US statement on its vulnerability to China will lead to dialogue. Beijing seems to have premised beginning dialogue on such a declaration in addition to encouraging the United States to adopt a "no-first-use" (NFU) policy.[9] Chinese officials could demand a US concession on one of the preconditions to begin dialogue, and then ask that the other be fulfilled before they continue. US diplomats must also consider the precedent-setting implications of making a major concession to begin dialogue. Will this indicate to China that it can replicate the tactic by threatening to break off dialogue proceedings that the United States was willing to sacrifice for? Will other states, such as North Korea, see China's successful extraction of concessions as a template to follow in future relations with the United States?

Similarly, there is no guarantee that more dialogue will produce more transparency. Western analysts must be careful not to mirror-image their intentions for dialogue (more transparency) onto Chinese intentions. There is evidence that China believes the

[6] One must note however that serious US investment in civil defense and air defense were short-lived and confined to the early years of the Cold War, whereas the Soviet Union heavily invested in both throughout the Cold War. Brendan R. Green and Austin Long, "The MAD Who Wasn't There: Soviet Reactions to the Late Cold War Nuclear Balance," *Security Studies*, vol. 26, no. 4, 2017, pp. 606-641.

[7] Elbridge A. Colby and Abraham M. Denmark, *Nuclear Weapons and US-China Relations* (Washington, DC: Center for Strategic and International Studies, 2013), pp. 19-20.

[8] Caitlin Talmadge, *The US-China Nuclear Relationship: Why Competition is Likely to Intensify* (Washington, DC: The Brookings Institution, 2019), pp. 6, 8 and, Gregory Kulacki, "Mutual Vulnerability with China a Reality, Not a Choice," *Union of Concerned Scientists*, October 11, 2013.

[9] David Santoro, *Testimony before the US-China Economic Security Review Commission* (Washington, DC: US-China Economic and Security Review Commission, June 20, 2019), pp. 6, 12.

burden of transparency lies on the stronger state, not on both states equally. As Zhenqiang Pan, a retired Chinese officer from the People's Liberation Army and a scholar at China's National Defense University has written China's NFU policy requires "technical opacity" concerning its nuclear forces and doctrine. In other words, if China retains its NFU policy, at least publicly, then that could remain a major inhibitor of increased Chinese transparency, even with a declaration of mutual vulnerability. China's policy of deliberate opacity regarding its forces and doctrine—a multidecade norm among Chinese leaders—will not be easily, or quickly, discarded because a formal dialogue has begun. This, alone, should temper expectations.

Another purported benefit of declaring mutual vulnerability, related to increased transparency, is the possibility of decreased tensions. Proponents, however, set their hopes too high. As stated in the first section, dialogue should precede a declaration on mutual vulnerability so that both sides understand what will become a regular term of reference. To place the declaration before dialogue is to invite misunderstandings, charges of negotiating in bad faith, and increased overall tensions as diplomats seek to sort out miscommunication from malintent. If, as Chinese diplomats regularly state, the concept of mutual vulnerability becomes the foundation for US-China relations, then dialogue without preconditions or demands is the least Chinese diplomats can grant. China's refusal to do so may indicate that the foundation of mutual vulnerability it claims is so vital, is not.

"To place the declaration before dialogue is to invite misunderstandings, charges of negotiating in bad faith, and increased overall tensions as diplomats seek to sort out miscommunication from malintent."

According to proponents, the three benefits of a declaration of mutual vulnerability listed above, increased dialogue, greater transparency, and decreased tensions, could produce Chinese restraint of its nuclear-weapon program. They also make the corollary argument, that the US refusal to declare itself vulnerable to China helps fuel China's growing nuclear arsenal. These arguments deserve scrutiny.

Beginning with the latter argument, that US inaction in declaring itself vulnerable has contributed to the Chinese reaction of growing its nuclear arsenal, the timeline of Chinese nuclear activity does not match up. The United States has never acknowledged mutual vulnerability with China, even back when China became a nuclear power in 1964. If the US non-declaration was such an influential variable in Chinese thinking, it should have led to a rapid expansion of its nuclear-weapon capabilities both in range and number through its first decades. Yet, until several years ago, China's nuclear arsenal grew gradually; only recently has it made a drastic jump in numbers. Moreover, since the end of the Cold War, the United States has reduced its nuclear arsenal by over 80 percent and maintained only 44 or fewer homeland missile defense interceptors.[10] It is difficult, therefore, to single out US actions, much less the longstanding US non-action of declaring mutual vulnerability, as reasons for the sudden and massive Chinese nuclear buildup.

Regarding proponents' argument that dialogue could result in a Chinese reduction or freeze of its nuclear arsenal, the evidence seems stacked against the possibility. The recent discoveries of hundreds of new missile silos in Western China, and the US Department of Defense projection that China will have "at least 1,000" nuclear warheads by 2030, indicates that China's leadership saw a need to expand its nuclear arsenal greatly and very quickly, without even suggesting the possibility of arms-control talks.[11] It is heroically optimistic to suggest that a mere rhetorical commitment from the United States on mutual vulnerability carries enough weight with the Chinese leadership either to freeze their nuclear buildup or bring them to the negotiating table for serious discussions while China still has a smaller arsenal.

[10] National Nuclear Security Administration, "Transparency in the U.S. Nuclear Weapons Stockpile," *Energy.gov*, October 2021.

[11] US Department of Defense, *Military and Security Developments Involving the People's Republic of China* (Washington, DC: Department of Defense, 2021), p. 90.

Additionally, one condition must be present for a declaration of mutual vulnerability to produce the intended benefits with China, a condition that proponents rarely discuss: China must believe it. After Chinese officials accept the declaration from the United States on mutual vulnerability, will they believe it? Will they find it credible with the current and planned US nuclear posture? Will they ask for further assurances, like a freeze on US homeland missile defense? Or will China, emboldened by its growing nuclear arsenal, demand even more from the United States, like an end to its system of alliances in and around Asia?

Stated plainly, how far will the United States—and perhaps its allies—need to go to make China's leadership believe a US statement of mutual vulnerability? Those looking to history for answers will find the Cold-War parallel between the United States and the Soviet Union does not bode well for proponents of declaring mutual vulnerability. As a 1982 US National Intelligence Estimate states: "… they [Soviets] regard nuclear war as a continuing possibility and have not accepted mutual vulnerability as a desirable or permanent basis for the US-Soviet strategic relationship."[12] Again, despite signing the ABM Treaty—a far more verifiable and costly commitment than a mere statement of mutual vulnerability—neither the United States nor the Soviet Union were satisfied with the condition of mutual vulnerability.

If China is likely to be swayed by rhetorical commitments on mutual vulnerability, as its proponents believe, then they must explain why it has not been swayed by a similar commitment: nearly two decades of senior US official statements on how US homeland missile defense is not built to negate China's nuclear arsenal. As early as September 2001, senior US officials have stated explicitly, repeatedly, and in public that the US homeland ballistic missile defense system was only aimed at so-called "rogue states," North Korea and Iran.[13] Official US policy documents and senior US officials in every presidential administration since George W. Bush have repeated the same line.[14] US officials have even publicly offered "several times" to address the technical questions and concerns Chinese officials have raised concerning the US Terminal High Altitude Area Defense (a.k.a. THAAD) radar based in South Korea; Chinese officials declined.[15] The failure of these commitments to persuade Chinese officials only adds to the doubt that a related commitment—mutual vulnerability—will be successful.

While additional dialogue, increased transparency, reduced tensions, and a restricted Chinese nuclear arsenal are all potential benefits of the United States declaring mutual vulnerability, they are far from certain benefits. It is easy to speculate on the broad potential benefits of such a declaration, but these are uncharted waters. Previous expeditions, such as seeking to assure China concerning US homeland missile defense, have failed, and not for lack of US effort. Chinese officials have repeatedly sought, and received, reassurances from the United States, albeit not in the precise forms they desire, which has left them unsatisfied. One must wonder, then, what it is about official rhetorical commitments that China values so highly when the *de facto* reality on the ground already meets its demands. This question leads to the potential costs of declaring mutual vulnerability.

Third Assumption: Benefits Outweigh Costs

Some proponents of declaring mutual vulnerability may agree that there are difficulties in obtaining the benefits outlined above, but still believe that if nothing is ventured nothing will be gained, so the United States must try. Such an approach ignores the number and severity of risks involved, risks that have received far too little attention. There are three potential costs or risks, from the perspective of the United States, that caution against adopting a declaration of mutual vulnerability: the domestic political fallout, the reactions of allies, and the diplomatic and political costs with China.

A US president, senator, or representative considering whether to support a declaration of

[12] Director of Central Intelligence, *Soviet Capabilities for Strategic Nuclear Conflict, 1981-91, National Intelligence Estimate Volume 1 – Key Judgements* (Washington, DC: CIA, March 23, 1982), p. 2, formerly Top Secret and now declassified.

[13] Ari Fleischer, "US, China to Discuss Missile Defense," *State.gov*, September 4, 2001.

[14] Representative examples include: US Department of Defense, *Ballistic Missile Defense Review* (Washington, DC: Department of Defense, February 2010), pp. 12-13, Rose Gottemoeller, "Remarks at the 2013 Multinational BMD Conference and Exhibition," *State.gov*, October 31, 2013, Frank A. Rose, "Multinational Ballistic Missile Defense Conference," *State.gov*, October 6, 2015, Frank A. Rose, "Missile Defense as a Hedge," *State.gov*, June 16, 2016, and US Department of Defense, *Missile Defense Review* (Washington, DC: Department of Defense, 2019), p. v.

[15] Frank A. Rose, "The Role of Missile Defense in Advancing US National Security and That of Its Allies," *State.gov*, May 5, 2016.

mutual vulnerability with China will ask: "How will the American people react?" The answer is "very poorly." Although many of the US foreign policy elite, trained in the Cold-War orthodoxy that defending weapons is good while defending people is bad, may answer that vulnerability is the only option, the typical (and far more numerous) American voter will not want his or her representatives conceding that America is vulnerable to anybody, least of all China, which the United States has labelled "the pacing threat."[16] Foreign policy, admittedly, does not play as large of a role in US elections as domestic policy, but the attack ads write themselves. What politician wants to be seen as supporting US vulnerability?[17] Even if a US president believes the benefits outweigh the risks and makes the decision to declare mutual vulnerability with China, members of the US Congress will take note, loudly disagree, and support additional funds for US programs that could be placed at risk because of the declaration. China will then receive mixed signals from the United States and wonder, if it did not already, whether an explicit declaration of mutual vulnerability is only one presidential term away from being discarded.

US allies and partners, especially in the Indo-Pacific will likewise react negatively to a US declaration of mutual vulnerability. At the heart of the likely allied reaction will be the worry that the United States is tacitly signaling its vulnerability to Chinese coercion, especially in regional scenarios. Should China believe it has the advantage in perceived stakes in a regional conflict, as it appears to, then it may act on the favorable conventional balance of power locally and attack Taiwan or one of the disputed sets of islands in the surrounding seas. If such a conflict involved US allies or partners, then they may question US commitments to aid them militarily, at least to the extent that doing so could endanger the US homeland. Most US military forces that would come to the aid of an ally or partner during a conflict with China are based in the US homeland, the same homeland the United States would have declared was vulnerable *as a matter of policy* to China.

Even if a viable missile defense of the US homeland against limited Chinese attack was not available for the next decade, the "reality" of vulnerability may matter less to allies for assurance purposes than the perception that the United States "acknowledges" or "accepts" that vulnerability. Discussions on mutual vulnerability, both in and out of the US government, has waned since the Obama administration, and much more so within allied states; so, any US declaration of mutual vulnerability with China—even with extensive pre-consultations with allies—would likely come as an unwelcome surprise. The international context matters in this regard. How should Taipei, Tokyo, Seoul, and Canberra view a US declaration of mutual vulnerability with China when the Chinese threat posed to them is growing precipitously?[18]

"US allies and partners, especially in the Indo-Pacific will likewise react negatively to a US declaration of mutual vulnerability. At the heart of the likely allied reaction will be the worry that the United States is tacitly signaling its vulnerability to Chinese coercion, especially in regional scenarios."

Perhaps the primary reason China has insisted consistently on an official US declaration on mutual vulnerability is the likelihood that it would sow division in the US system of alliances in the Pacific. Whether US officials believe it is warranted, allies will likely perceive a declaration of mutual vulnerability as a sign that the United States is either unable or unwilling to resist Chinese coercive threats to the US homeland during a conflict, thus allowing

[16] Jim Garamone, "Austin, Blinken Trip All About Partnerships With Asian Allies," *Defense.gov*, March 13, 2021.

[17] As Thérèse Delpech has written, "Finally, a world resting on mutual vulnerability not by chance but willingly is and will remain extraordinary. Experts can use it for smart presentations, but public opinions will never buy it for long." Thérèse Delpech, "Ballistic Missile Defense and Strategic Stability" in Paolo Cotta-Ramusino and Maurizio Martellini (eds), *Missile Threats and Ballistic Missile Defense: Technology, Strategic Stability, and Impact on Global Security* (Como, Italy: Landau Network-Centro Volta, 2001), p. 56. I am grateful to David Santoro for alerting me to this quotation.

[18] Japan appears to be particularly sensitive to a potential US declaration of mutual vulnerability. See Brad Roberts, "Strategies in Northeast Asia," *C-SPAN*, event at the Stimson Center, August 26, 2013, minute 31:04-32:00, available at https://www.c-span.org/video/?314724-1/stimson-center-hosts-talk-stability-northeast-asia and Yukio Satoh, *US Extended Deterrence and Japan's Security* (Livermore, CA: Lawrence Livermore National Laboratory, October 2017), pp. 30-31.

for the possibility of a decoupling of the alliance. Proponents of such a declaration may reply that if allied confidence in the United States is shaken so easily by a rhetorical statement, then the alliance may have more fundamental issues. Such a reply, however, mistakenly attributes allied objections to the form of the declaration rather than their true, and far more fundamental objection, US intentions behind issuing it.

While US officials should expect domestic and allied opposition to a declaration of mutual vulnerability, they should also set realistic expectations for how China will respond. The optimistic proponent of such a declaration might expect China to respond by discussing important topics with the United States in good, if cautious, faith. But what if that is wrong? What if Chinese diplomats use the declaration as a cudgel instead of a cornerstone for the US-China relationship? Is it realistic to expect China's "wolf warrior" diplomats to accept a major US concession and reciprocate by transforming their policy of opacity to that of clarity?

As with any major foreign policy decision, US officials must anticipate what could go wrong if expectations or assumptions go unmet, an exercise applicable to a declaration of mutual vulnerability. There are good reasons to believe that China's diplomats will continue to pursue China's national interests through a mixture of confrontation and feigned attempts at cooperation with the United States. Given China's near- to mid-term goals of achieving undisputed regional hegemony and incorporating Taiwan into its homeland, the United States should expect China's diplomats to use the declaration of mutual vulnerability to attack those US weapon systems they view as most likely to impede or threaten their expansionist ambitions. In other words, Chinese officials are likely to label whichever US weapon systems they believe threatens their national interests as threatening the condition of "mutual vulnerability."

This exposes the great "Trojan horse" of a declaration of mutual vulnerability. It appears to apply equally to both the United States and China, but China alone can use it to denounce US systems. Since China's nuclear arsenal remains smaller than that of the United States, and is projected to stay smaller through 2030, Chinese officials will be, for the foreseeable future, the only ones in a position to label opposing weapon systems as threatening to the condition of mutual vulnerability. China also retains the additional advantage that there is no apparent domestic "peace movement" pressuring the government to moderate its diplomatic or military policies in support of maintaining a condition of mutual vulnerability. In short, a declaration of mutual vulnerability allows China to label US weapons as problematic, but not vice versa.

Even worse than aggressive Chinese diplomatic behavior, however, is the potential for Chinese officials to view a US declaration of mutual vulnerability as a sign of weakness and a signal that aggression below the nuclear level is potentially profitable. As Kori Schake testified in 2012, when US officials last seriously considered the topic of mutual vulnerability in public:

> The declaration and preservation of mutual vulnerability is a terrible strategic posture, far less stabilizing than a defense-dominant order. Mutual vulnerability may be a fact of life, but it ought not be our objective. I also doubt a declaration of mutual vulnerability would benefit us. This Chinese government would likely take it to mean the US intends to sacrifice any interests we have that conflict with China's, and that would only encourage the irredentism China is already inclined toward and frighten US allies relying on our willingness to preserve the status quo in Asia against assertive Chinese claims.[19]

Given Chinese stated national goals, and their basic incompatibility with US national interests, it is not difficult to envision Chinese officials employing mutual vulnerability not as a tool for greater cooperation, but to agitate for limits on US weapon systems or even a fundamental disengagement from Indo-Pacific allies.

Conclusions

One of the great ironies of the nuclear era is that when destructive military power reached its technical zenith, many civilian strategists made a virtue out of a vice and declared vulnerability—a condition feared by state leaders for millennia—an inherent good.

[19] Kori Schake, as quoted in House Armed Services Committee, Subcommittee on Strategic Forces, *Nonproliferation and Disarmament: What's the Connection and What Does that Mean for US Security and Obama Administration Policy?* (Washington, DC: US House Armed Services Committee, August 1, 2012), p. 197.

Others were less enthusiastic about the condition but feared that attempting to change it would be more dangerous. Strategic reality became preferred policy, and the United States and the Soviet Union claimed fealty to mutual vulnerability, though neither's practices matched their policies. Given the successful outcome of the Cold War (from the perspective of the United States) and the rise of another nuclear-armed state with a revisionist agenda, some Americans and officials in China have proposed once again making an explicit commitment to maintaining mutual vulnerability as the basis for a stable relationship.

As detailed earlier, however, it is doubtful that the United States and China can agree not only to a definition of mutual vulnerability, but also arrive at a common understanding of how that definition will apply to various weapon systems, policies, and commitments. The benefits that proponents believe might accrue—broader dialogue, increased transparency, reduced tensions, and restrained arsenals—are overly optimistic and unlikely results. The potential costs, however—domestically, with US allies, and in the political and military relationship with China—are both more substantial and more likely than the potential benefits. In short, a US declaration of mutual vulnerability with China is unlikely to shift bilateral relations in a more benign direction, while increasing the risk of damaging the US relationship with its allies.

Thankfully, abandoning the idea of declaring mutual vulnerability does not mean the United States must abandon the desired goals of a such a declaration: broader dialogue, increased transparency, reduced tensions, and restrained arsenals. In other words, the United States and its allies can explore other means to achieve these goals. For instance, the US experience with the Soviet Union during the Cold War demonstrated that a visible and credible US commitment to its nuclear modernization program helped convince the Soviet leadership that arms-control discussions were in their best interest—a dynamic that may eventually influence the Chinese leadership to engage in dialogue on the issue.[20] Additionally, the United States can continue engaging with its allies and partners in the region to make clear to Beijing that US commitments are sure, and efforts to divide them will fail.

Perhaps most ambitiously, the United States could explore talks with China about moving the military relationship from one that is offense-dominant to one that is defense-dominant. Obviously, such a move must include Russia, but the prospects of such talks are intriguing enough to be worth investigating. Given Russia's and China's efforts to develop their homeland missile defenses, jointly and individually, plus US efforts to do the same, there may be enough common ground for each state to recognize the others' defensive imperatives as a building block for dialogue. For instance, a homeland missile defense system capable of neutralizing a limited attack would provide a defense against unauthorized or accidental missile launches, a capability in each state's interests, especially during crises. Additionally, a homeland missile defense system built to counter limited opponent attacks could potentially disincentivize nuclear escalation above a conventional conflict in some scenarios, again, something in each state's interests. There are several potential obstacles—not the least of which, the lingering Cold-War orthodoxy of mutual vulnerability—but domestic and allied opposition is likely to be far lower for the United States, and the proposal has the added virtue of building on the technology either in hand or nearly available in each state.

US officials face competing priorities in deciding whether declaring mutual vulnerability with China is in the national interest, but such a declaration is not the only route to an improved relationship with China, and the potential costs loom large at home and abroad. A US declaration of mutual vulnerability with China promises falsely to fix quickly a fundamentally complex and competitive relationship. US officials should continue to pass on such a declaration, while recommitting themselves to finding a more durable foundation for peace than vulnerability.

[20] Matthew R. Costlow, "An Overlooked Aid to Arms Control: US Nuclear Modernization," *Strategic Studies Quarterly*, vol. 15, no. 3, Fall 2021, pp. 34-47.

4

If the United States Acknowledges Mutual Vulnerability with China, How Does it Do It—and Get Something?

Lewis A. Dunn

Whether the United States should acknowledge mutual nuclear vulnerability with China has long been an issue in Track-1.5 (semi-official) and Track-2 (unofficial) US-China dialogues. Its prominence is the result of frequent calls by Chinese retired officials and experts that the United States take that step. Their argument is that a US acknowledgement would be the best way for the United States to reassure China of its benign strategic intentions.[1] Implicit in that argument is the assumption that acknowledgment of mutual vulnerability means restraining US actions that seek to undermine China's nuclear deterrent. In other words, that acknowledgment means acceptance.[2] US participants in semi-official and official dialogue have acknowledged the fact of US vulnerability to China's nuclear arsenal but questioned the strategic payoff or political feasibility of any official statement. Officially, Washington has not been prepared to state that mutual vulnerability should be the basis for the US-China nuclear relationship.

Some chapters in this volume concentrate on whether the United States should acknowledge mutual vulnerability with China. This chapter assumes that a US decision to do so has been made and explores four other questions. First, what are the options for *how* the United States could acknowledge mutual vulnerability—and their respective pluses and minuses? Second, what could the United States seek *to get out of* acknowledging mutual vulnerability in terms of a demonstrable benefit for US strategic objectives vis-à-vis China—over and above simply a fuzzy hope for a better strategic relationship? Third, what would be metrics of success, failure, or a mixed outcome from US acknowledgement in pursuit of specific strategic objectives? Fourth, assuming a continued US decision not to acknowledge mutual vulnerability, how should the United States convey that decision? Finally, by way of a brief afterward, this chapter considers the implications of its arguments for whether the United States should or should not acknowledge mutual vulnerability with China.

Acknowledging Mutual Vulnerability – How to Do So?

There are different ways in which the United States could acknowledge mutual vulnerability. To illustrate that spectrum of possibilities, this section sets out five options. It discusses the relative pluses and minuses of each.

Routine Statement

The United States could acknowledge mutual vulnerability in a low-key, routine statement by a mid-level official. Doing so in a testimony to Congress by an appropriate Deputy Assistant Secretary of Defense would be one option. A statement by a US official in a Track-1.5 US-China dialogue meeting would be another. Doing so in the latter forum, however, would carry less weight given that US participants have repeatedly emphasized that only through official dialogue can US officials respond to Chinese concerns.

A routine statement would be closest to type of matter-of-fact acknowledgements of the reality of mutual vulnerability already made by US officials in Track-1.5 and Track-2. This type of statement might generate less opposition from opponents in Congress or among US allies concerned about China's nuclear modernization and its increasingly assertive regional posture. But it will not go unnoticed. So, the impact of a low-key, routine acknowledgement in damping opposition is likely to be marginal at best. At the same time, one reason for making such a statement would be to reassure Chinese officials that the United States does not intend to undermine China's nuclear deterrent and, in so doing, to help temper China's perception that a major expansion of its nuclear deterrent is needed to ensure its survivability.[3] That said, while Chinese officials are unlikely to miss such a low-key, routine statement, it also is unlikely that they would find it reassuring regarding US strategic intentions because of its routine nature. Perhaps most important, given its limited reassurance in Chinese eyes, acknowledging mutual vulnerability in this

[1] David Santoro and Robert Gromoll, "A Review and Assessment of the Track-1.5 'China-US Strategic Nuclear Dynamics Dialogue", *Issues & Insights*, Special Report, vol. 20, no. 1, November 2020; Brad Roberts (ed.), *Taking Stock: US-China Track-1.5 Nuclear Dialogue* (Center for Global Security Research, Lawrence Livermore National Laboratory, December 2020).

[2] As used in this paper, acknowledgement of mutual vulnerability is defined to include that second element, not simply a declaration of intent but also actions consistent with it.

[3] During a recent Track-2 US-China arms control and crisis management dialogue, Chinese participants stressed that ensuring the survivability of China's nuclear deterrent was the driving force behind what US experts regard as the dramatic modernization of China's nuclear posture and capabilities.

manner is unlikely to get China to give something in return.

Senior-Level Statement or Reference

The United States could acknowledge mutual vulnerability in a statement by a senior-level US official, or in some other high-visibility reference. For example, acknowledgement could be part of a testimony by the Secretary of Defense or Secretary of State. Or it could be part of an opening US statement in a next round of official US-China political-military dialogue. Another possibility would be to include it in an official US document, such as the treatment of China in the upcoming Biden administration Nuclear Posture Review (NPR) and other strategic reviews.

Chinese officials would be more likely to regard a senior-level statement or reference to signal benign US strategic intentions and acceptance of China's nuclear deterrent. Inclusion in the upcoming NPR would underline that intention, particularly because China's nuclear modernization and its overall strategic-regional posture are likely to figure prominently in that document.[4] However, China has discounted comparable past statements that US missile defenses are not aimed at China, as evidenced by its ongoing nuclear build-up as well as by statements by Chinese experts and officials in past semi-official dialogues. Still, including it as part of the upcoming NPR could well soften other China-related elements of that review. A senior-level statement or reference is likely to stir up greater opposition within Congress and among US allies. That said, if made as part of a more comprehensive response to China's nuclear modernization, e.g., in terms of other possible changes of the US strategic posture, the extent of opposition could be reduced. Nonetheless, as with the preceding approach, there would be no guarantee or expectation of a positive Chinese response, despite the greater investment of US bureaucratic and political capital to make it happen.

"Chinese officials would be more likely to regard a senior-level statement or reference to signal benign US strategic intentions and acceptance of China's nuclear deterrent."

Part of a Negotiated US-China Statement Announcing Official Strategic-Nuclear Dialogue

For well over a decade, US officials in then-ongoing semi-official dialogue have emphasized the importance of setting up such an official bilateral dialogue. Chinese participants, including officials, have demurred. Their argument has been that the time is not ripe. When probed, those participants did not explain explicitly the reasons for Chinese reluctance. More recently, however, Chinese participants, including both retired officials and serving officials, have in various forums signaled a Beijing's readiness for such official dialogue.[5] So, acknowledgement of mutual vulnerability could be folded into a broader and negotiated US-China joint statement announcing initiation of dialogue. By way of example, the two sides could state that "in light of their joint recognition of the dangers to both countries of unrestrained strategic competition and taking into account the mutual vulnerabilities of both countries arising from the threat of such competition, the two countries today announce their intention to initiate a robust, multi-tiered, and integrated process of strategic-nuclear dialogue." In turn, to strengthen such a statement, it could include a US and Chinese statement that the goal of an official dialogue would be agreement on "swift and practical actions to reduce strategic dangers." Other comparable formulations are conceivable.

Compared to the preceding approaches, such a statement would provide a much clearer signal of US strategic intentions to Chinese officials. Possible questions about whether it meant that the United States would not seek to undermine China's nuclear deterrent but accepted its existence could be clarified in the process of negotiating this announcement. As structured, this type of acknowledgment would also achieve the long-standing US goal of official strategic-nuclear dialogue. In turn, Chinese agreement to that goal would be an initial signal to the United States of Chinese readiness to explore

[4] This reflects statements made by US participants at a recent China-US arms control and crisis management Track-2 meeting, held in November 2021.

[5] This readiness was evident in the Track-2 dialogue referenced above. In addition, the report of the United Nations Secretary General's Advisory Body on Disarmament Matters, whose members include the Chinese ambassador to the Geneva Conference on Disarmament, endorses the need for official dialogue among nuclear-armed states. See *Work of the Advisory Board on Disarmament Matters*, Report of the Secretary-General, A/76/183, July 6, 2021.

jointly ways to manage the risks of increased strategic competition. Folding acknowledgment into launching official dialogue could reduce opposition in the US Congress and with US allies, though opposition still would have to be expected. Perhaps the most important limitation of this approach is that it continues to bet on the cards to come. Even with language emphasizing the goal of "swift and practical actions to reduce strategic dangers," its expectation that it will lead to serious dialogue and practical actions to manage the risks of an increasingly adversarial US-China strategic-nuclear relationship could yet prove overly optimistic.[6]

Include within a Presidential Summit Statement

Closely related to the previous option, a US acknowledgement of mutual vulnerability could be part of a broader statement issued at a Biden-Xi summit. The other related elements of such a statement could be defined narrowly or broadly. Narrowly, such an acknowledgement could be combined with a simple announcement of official dialogue to understand and manage the risks of the US-China strategic nuclear relationship. Considerably more broadly, an acknowledgment could be combined with a declaration on principles and practices for stabilizing the US-China mutual deterrence relationship, including commitments not to undermine each other's nuclear deterrent postures as well as to pursue and implement confidence-building and transparency measures to address mutual uncertainties, reduce the risk of nuclear confrontation by accident or miscalculation, increase predictability, and lessen distrust.

The pluses and minuses of this approach would track mostly those of the preceding approaches—but more so in each dimension. Given its greater visibility and prominence, the potential signal about US intentions would likely have greater credibility in Chinese eyes. But for similar reasons, opposition in Congress and among US allies would be also likely greater. Practical results again would be deferred and depend on China's readiness to follow-up to identify and then implement confidence-building actions jointly with the United States. However, the fact that such a commitment would have been made by Xi Jinping would increase the credibility of a US expectation of future results. Xi's agreement would authorize and direct cooperation by lower-level officials.[7]

Make Acknowledgement an Early Outcome of a US-China Strategic-Nuclear Dialogue

Rather than as a precursor to official strategic-nuclear dialogue, acknowledgement of mutual vulnerability could be undertaken in the context of such a dialogue—assuming, of course, that there is agreement to establish such a dialogue. Acknowledgment would become part of an early negotiated outcome. There are different ways of doing so. For example, acknowledgement could be folded into an initial outcome in the form of a Joint Political Agreement on Principles and Actions for Stabilizing the US-China Mutual Deterrence Relationship. Or it might be one of several more discrete actions to reduce the risks of adversarial competition along the lines discussed in the following section.[8]

From a US and a Chinese perspective, this approach would provide an opportunity to fold other elements of interest into a broader package. Possible "added elements" range from greater transparency of the endpoint of China's ongoing nuclear modernization to agreement to US-China strategic risk reduction measures, e.g., commitment to no cyber probing or attacks on nuclear command-and-control. Depending on the elements, the associated benefits for US interests could help respond to critics of formal recognition of mutual vulnerability. Still, criticism would need to be anticipated. This approach, however, would require more investment of time and energies, both at home to create a bureaucratic consensus as well as in consultations with allies. It also would take more time to happen. Not least, China may not want to engage, and even if there is agreement to begin an official dialogue, the two countries may not reach agreement on the type of package proposed here. Nonetheless, a US proposal that an official strategic-nuclear dialogue be established and that one of its initial outcomes should be US acknowledgement of mutual vulnerability in a

[6] On the risks of increasingly adversarial strategic competition between the United States and China as well as the uncertainties of Chinese readiness to pursue cooperative actions to manage those risks, see Lewis Dunn, "Adversarial strategic competition between China and the United States: understanding and mitigating its risks," *China International Strategy Review*, vol. 3, no. 1, June 2021, pp. 1–19 (2021).

[7] In the workshop that discussed the preliminary version of this paper, one of the Chinese participants underlined the importance of agreement at the top for any efforts to explore and pursue cooperative strategic risk reduction measures between the United States and China.

[8] During the workshop, one of the Chinese participants commented that such an approach of making acknowledgement of mutual vulnerability part of a wider US-China process of risk reduction negotiations could be the most promising way forward.

package of risk reduction measures would be one way to test China's intentions and provide insights into where China wants this relationship to go.

Acknowledging Mutual Vulnerability—What to "Get Out of It"

Underlying the preceding discussion is the proposition that if the United States takes this step, it should do so in a way that yields specific benefits. This section explores what demonstrable benefits the United States could seek from such acknowledgement. To do so, it begins by a quick consideration of today's US-China strategic nuclear relationship and the dangers inherent in it for both Washington and Beijing. Then, it sets out a spectrum of possible US objectives, from the less to the more ambitious.

Today's Adversarial US-China Strategic Relationship

An extensive discussion of today's US-China strategic relationship exceeds the scope of this more narrowly focused paper.[9] Suffice it only to make two points.

First, the United States and China today are now entering an increasingly adversarial strategic nuclear relationship. That outcome is the result of many factors, including conflicts of interest and ambitions in Asia; mutual uncertainties and lack of trust about each other's strategic intentions; the dynamic interactions of deployed and to-be-deployed strategic capabilities, not only nuclear weaponry, but also conventional weaponry, missile defenses, and space and cyber space capabilities; leadership ambitions; and the recrudescence of a clash of values between two very different countries. Some areas of common interest persist, notably mitigating the risks of strategic competition, described below. Nonetheless, looking ahead the dominant theme is one of increasing competition.[10]

Second, an increasingly adversarial relationship brings increasing risks and dangers for both the United States and China. At the least, there is a danger of competitive armament as each side responds to the strategic nuclear programs of the other. Already, that process of interaction is evident, for example, in the dramatic modernization of China's nuclear forces said driven by alleged concerns about US threats to the survivability of China's existing nuclear deterrent as well as in US reactions to China's testing of hypersonic ballistic missiles, one of the elements of its strategic modernization. Incidents involving each side's military forces and assets are another risk in any one of the multiple domains of strategic confrontation—air, sea, space, and cyberspace. Intense political-military crisis short of conflict are possible. They could result from missteps, incidents, and other flashpoints.

Of even greater concern, there is an inherent risk that any crisis, confrontation, or lower-level conflict could escalate to higher levels of violence. Misinterpretation and miscalculation of each other's military signals and actions could drive such escalation; but so could the intentional interaction of the two sides military postures in the pursuit of a favorable outcome in any military clash. Not least, escalation to, and possibly even across, the nuclear threshold is a danger. Here, given the grave consequences for both countries of any nuclear use, the most likely escalation pathways involve accident, miscalculation, or misinterpretation. But use out of desperation to avoid defeat cannot be ruled out.

Taken together, a recognition of these dangers provides the necessary backdrop for consideration of what the United States might seek to get out of acknowledgment of mutual vulnerability, and the more fundamental question of whether to do so. Specifically, acknowledgement needs to offer direct benefits for reducing the risks of today's adversarial US-China strategic relationship. There is a range of possible benefits to be weighed in the balance in any decision on this matter.

Testing China's Intentions to Engage in Strategic Risk Reduction

The United States could use the process of official acknowledgment of mutual vulnerability as a test of China's strategic intentions. Those intentions appear increasingly uncertain to US officials and experts. Concern is rooted in China's robust modernization of its nuclear forces, pursuit of advanced military technologies such as hypersonic weapons, and activities in outer space and cyber space that appear designed to provide capabilities not simply to

[9] For a fuller discussion, see Lewis Dunn, *op. cit.*

[10] For a US perspective by two persons now in senior positions in the Biden Administration, see Kurt M. Campbell and Jake Sullivan, "Competition without Catastrophe: How America Can Both Challenge and Coexist With China," *Foreign Affairs*, vol. 98, no. 5, September-October 2019, pp. 96-110.

degrade US conventional capabilities in a regional conflict, but also to provide options against US nuclear forces.[11] In addition, elements within the Chinese defense community appear to downplay the escalatory risks of a military confrontation with the United States, and to be confident in their ability to control escalation and manage nuclear risks.[12]

Linking US acknowledgement of mutual vulnerability to the establishment of official strategic-nuclear dialogue would start to test China's intentions. As noted above, during nearly two decades of semi-official and official dialogues, Chinese officials argued repeatedly that the time was not ripe for official dialogue. Acceptance of official dialogue would be a minimal signal of Chinese readiness to explore more cooperative strategic nuclear risk reduction measures. Were China to continue to refuse such a dialogue, that refusal would send an important message.

Nonetheless, agreement to start official dialogue would not answer fully the question whether Chinese officials and military believe that it is in China's interests to cooperate to manage the risks and instabilities of nuclear and strategic competition in multiple domains. A better test of China's intentions would be its readiness to identify, negotiate, and then implement meaningful cooperative risk reduction measures. For that reason, it would be preferable—assuming a decision to do so—only to acknowledge mutual vulnerability as one element of an initial package of negotiated unilateral and bilateral risk reduction actions. From that perspective, there are several additional benefits that the United States could seek even while recognizing that in this process China would have its own set of initial benefits to be sought over and above simple acknowledgment of mutual vulnerability.

"A better test of China's intentions would be its readiness to identify, negotiate, and then implement meaningful cooperative risk reduction measures."

Statement on Stabilizing the US-China Mutual Deterrence Relationship

Assuming an acknowledgement only in the broader context of a robust, official dialogue aimed at reducing strategic nuclear risks, the United States could propose negotiation of an agreed statement on "Stabilizing the US-China Mutual Deterrence Relationship." Such a statement could include both principles and practices that both countries would follow to reduce and manage the risks of adversarial strategic competition. Acknowledgement of mutual vulnerability would be folded into that overall statement in the form of a principle that neither side would act to undermine the other's nuclear deterrent—in peacetime, crisis, or conflict. A particular variant would be to pledge "no-first strategic attacks." Such a pledge would encompass a mutual commitment not to use nuclear weapons first, long sought by China. But it would go beyond it to include commitments not to initiate first attacks against each other's nuclear deterrent with advanced conventional, space, and cyber assets.[13] Other possible principles could address the risks of escalation, including to the nuclear threshold as well as crisis avoidance and management. Mutual commitment to follow-up with more specific implementing risk reduction agreements and measures with the goal of "swift and practical actions" for reciprocal restraint could be included. Possibilities range from a mutual commitment to no cyber probes of each other nuclear command-and-control to limits on near-fly-bys in space.

For both countries, the incentive would be to lessen the risks of unfettered strategic competition by signaling mutual intent. Acknowledging mutual vulnerability in the context of an ongoing strategic dialogue also would help maintain that dialogue. Doing so in a more "holistic" set of principles would gain Chinese agreement at the top and be consistent with China's thinking in terms of principles first, then

[11] On this overall pattern of robust military and strategic modernization, as seen from the United States, see Office of the Secretary of Defense, *Military and Security Developments Involving the People's Republic of China, 2021*, Annual Report to Congress.

[12] See Brad Roberts, *On Theories of Victory, Red and Blue* (Center for Global Security Research, Lawrence Livermore National Laboratory, February 2021); Tong Zhao in Lewis A. Dunn, Andrei Baklitskiy, and Tong Zhao, *Some Thoughts on the Logic of Strategic Arms Control: Three Views* (United Nations Institute for Disarmament Research, Geneva, 2021).

[13] A variant of this idea was first put forward by David Gompert and Phil Saunders. It also was raised in the Track-1.5 China-US Strategic Nuclear Dynamics Dialogue. On Gompert and Saunders, see David C Gompert and Philip C Saunders, *The Paradox of Power: Sino-American Restraint in an Age of Vulnerability* (Washington, DC: National Defense University Press, 2011). Also see Lewis Dunn, *op. cit.*, pp.11-12.

actions. Follow-up agreements would address specific risks to both countries.

Greater Chinese Nuclear Transparency

More narrowly focused, the United States could seek to trade acknowledgement of mutual vulnerability for greater Chinese transparency concerning the end point of its ongoing nuclear modernization. Minimally, greater transparency could take the form of a political statement of China's intentions not to build up to, or above, US and Russian nuclear force levels. Or it could entail a statement that China would not deploy more than a given number of nuclear warheads. More far-reaching, the United States could seek a more comprehensive description of China's planned nuclear deployments.

For China, a simple US statement that "it acknowledges mutual vulnerability" almost certainly would be an insufficient trade for such greater transparency. It leaves two more fundamental questions.

The first is whether acknowledgment means acceptance, i.e., that the United States will not pursue future capabilities and actions to undermine the survivability of China's nuclear deterrent. At the least, Chinese officials could be expected to seek such reassurance. At this initial stage, reassurance could take the form of an explicit US statement that acknowledgement means acceptance. That statement could be buttressed by proposals to use the ongoing dialogue to identify and negotiate possible parallel unilateral or bilateral implementing actions.

"For China, a simple US statement that 'it acknowledges mutual vulnerability' almost certainly would be an insufficient trade for such greater transparency."

The second question is whether any such US reassurance would be sufficiently credible to the Chinese, or whether they would expect that the United States still would take actions and plan steps to negate China's nuclear deterrent, if only in a time of conflict. Part of the answer lies in whether the United States and China can agree on implementing actions that would both give credibility to the US statement of acceptance and bring specific benefits to the United States in terms of windows into, and restraints on, China's nuclear modernization. Limits on US deployments of missile defenses in return for limits on China's deployments of hypersonic strategic delivery systems would be one example. Limits on US long-range conventional strike capabilities in return for Chinese nuclear transparency with limits on nuclear modernization are another.

With regard to this second question, the US-Soviet experience offers a more positive message about the credibility of acceptance of mutual vulnerability than is sometimes suggested.[14] US military planners in the 1970s and 1980s did continue to pursue strategic advantage vis-à-vis the Soviet Union even after mutual assured destruction became the watchword of the strategic relationship in the Kennedy administration and later after Presidents Reagan and Gorbachev affirmed that "a nuclear war cannot be won and must never be fought." But they did so in the context of the 1972 Anti-Ballistic Missile Treaty (ABM) and the limits on strategic offensive forces mandated on both countries by the Strategic Arms Limitation Talks (SALT). Both ABM and SALT blocked any escape from the reality of mutual vulnerability. At best, military planners' goal was to limit damage and not to come out "second best," whatever that would have meant in the event of an all-out US-Soviet nuclear conflict. For Presidents Reagan and Gorbachev, moreover, their affirmation of what came to be known as the Reagan-Gorbachev principle was a compelling signal of their strategic intent. Presidents, not planners, make the decision to use nuclear weapons, or to enter a crisis, conflict, and escalation that could lead to nuclear use.

Strategic Risk Reducing and Escalation Avoidance Measures

Acknowledgement of mutual vulnerability as more broadly defined above could be accompanied by US-China agreement to identify, negotiate, and implement more focused measures to reduce the risks of adversarial strategic competition, including escalation to the nuclear threshold. To implement

[14] See the chapter by Heather Williams in this volume.

such an agreement in principle, the two countries could create an official US-China working group on strategic risk reduction within the framework of the overall strategic-nuclear dialogue. That group could be comprised of defense officials, military personnel, technical experts, and foreign affairs officials. The group's mandate could begin with conducting a joint assessment of potential actions, miscalculations, and missteps that could lead to unintended escalation in a crisis or conflict. In so doing, it could be tasked to consider possible pathways—accidental, inadvertent, and intentional—to a nuclear conflict between the two countries. Not least, the mandate would include exploring measures that could be pursued—unilaterally or bilaterally—to reduce such strategic risks.

For the United States, but also China, the creation of such a group would be an important signal of each other's intentions. Both countries also have a shared interest in not stumbling into an escalating major conflict, including a nuclear conflict. Even if the group proves unable to identify cooperative measures, the process of such an assessment would provide insights into each other's thinking. In so doing, it could impact each country's unilateral behavior in a crisis or conflict in ways to lessen escalation risks. Over time, that could be a stepping-stone to negotiated restraints.

Acknowledging Mutual Vulnerability—How to Measure Success

The third question concerns how to measure success, i.e., assuming a decision by the United States to acknowledge mutual vulnerability. In part, the measure of success would depend on "the how" of any US acknowledgement. Consider first those ways of doing so that are not explicitly linked to "getting something" in return. Success would be measured primarily in terms of whether opposition in Congress and among allies was relatively muted. Recall that the main motivation for either the low-level matter of fact acknowledgement or even the higher level but still low-key acknowledgement would have been to mute criticism. Whether doing so took the issue off the table of whatever US-China dialogue were underway—or at least gave US participants a better response—would be a collateral plus. Equally so, if this type of acknowledgement had some positive impact in generating Chinese readiness to engage in a substantive dialogue, that outcome also would be a measure of success.

By contrast, the question of how to measure success is both more interesting and more complicated in the case of those ways of acknowledging mutual vulnerability that are more explicitly linked to getting something in return, in particular folding it into a US-China political declaration (including possibly at the presidential level) or even more so making it one of several outcomes from a process of strategic-nuclear dialogue. At one level, the minimal condition for success would be evidence of meaningful dialogue. In part, "meaningfulness" is likely to depend partly on the "eye-of-the-beholder." But it also will be evidenced by the extent to which Chinese interlocutors are prepared to go beyond talking points to more serious discussion of the dangers of increasingly adversarial US-China strategic competition, including on the margins of formal talks, as well as whether there is a readiness to explore specific risk reduction options and measures. US participants will be able to make that judgment. To paraphrase a famous statement related to First Amendment law by the late US Supreme Court Justice Potter Stewart: They will know it when they hear it. At this level, a closely related measure of success will be the extent to which US participants both believe that they have been able to make clear US concerns and believe that they have gained valuable insights into Chinese thinking and concerns—in both cases, lessening the risk of unintended crisis or conflict due to missteps, miscalculation, or misunderstandings.

At another level, success would be measured in practical results over and above lessened risk of potentially dangerous missteps, miscalculations, or misunderstandings. Here, some measures of success have already been set out above in discussing acknowledgement as an initial outcome of a process of strategic-nuclear dialogue.

Is there Chinese agreement to set up a working group to assess strategic-nuclear risks, including that of escalation to the nuclear threshold? Is it possible to trade-off not simply acknowledgement but acceptance of mutual vulnerability for greater transparency about the endpoint of China's nuclear modernization and limits on that modernization? During these initial stages of dialogue, do other possible areas of potential agreement on strategic-nuclear risk reduction arise and prove realizable? On both these levels, a related measure of success will be whether the results gained are sufficient to respond to criticisms from Congress and concerns among US allies in Asia. In today's hyper-partisan environment,

the former may be unattainable; the latter, however, may be more achievable, especially with efforts from the start to explain US reasoning, keep allied capitals in the loop of any negotiations with Beijing, and seek outcomes that would serve their shared interest in reducing strategic-nuclear risks in the US-China strategic relationship.

Acknowledging Mutual Vulnerability—How to "Say No"

Assuming the Biden administration decides not to acknowledge mutual vulnerability, there are different ways that a decision to "say no" could be conveyed to Chinese experts and officials. Some ways of *not* acknowledging mutual vulnerability, however, could have greater adverse spillovers than others for managing the risks of an increasingly adversarial strategic nuclear competition between the United States and China.

The easiest approach would be to maintain the current approach. If the issue is raised by Chinese officials or experts, their US interlocutors would once again state that the United States recognizes mutual vulnerability as a fact and thinks it unnecessary to say anything on the topic. This statement of fact would be even more credible now given the dramatic modernization of China's nuclear posture. Compared to some alternatives (considered next), this approach would also be least likely to raise questions or provoke contentious debate that could well prove troublesome for US interest in managing, if not reducing, the risks of strategic competition between the two countries.

A different alternative would be to explicitly state that even though mutual vulnerability today is a fact in the US-China nuclear relationship, the United States is not prepared to accept that reality as the basis of that relationship. This statement would negatively answer the question whether acknowledgement means acceptance. US officials would be signaling readiness, if opportunities arise, to pursue actions that would reduce US nuclear vulnerability. Such a statement would serve only to confirm the worst fears within the Chinese military and expert community that the United States is seeking to undermine China's nuclear deterrent or would do so if it becomes possible. As such, it would both reinforce already substantial pressures for nuclear modernization and lessen prospects for agreement even to explore possible measures to reduce the dangers of strategic competition. More important, as evidenced by China's significant investment in ensuring the survivability of its nuclear deterrent—with survivability defined in its own eyes—any US efforts to escape mutual vulnerability with China are likely to prove unavailing. Assuming that such efforts were to be made regardless, signaling in this way would only undercut them.[15]

"The easiest approach would be to maintain the current approach. If the issue is raised by Chinese officials or experts, their US interlocutors would once again state that the United States recognizes mutual vulnerability as a fact and thinks it unnecessary to say anything on the topic."

Yet another alternative approach for saying no to acknowledgement of mutual vulnerability would be to take a leaf from the Chinese playbook and state that mutual vulnerability is a Cold-War concept and that the United States should seek ways to avoid another Cold War, this time with China. This approach would differ from the current approach by closing the door on acknowledgment and shifting the debate to the overall state of the political relationship between the United States and China. Allusions to the Cold War, however, would also reinforce China's aversion to arms control, another Cold-War concept. By doing so, it would make it more difficult to convince Chinese officials that even if the type of formal treaty-based arms control pursued by Washington and Moscow is not now appropriate for reducing US-China strategic-nuclear risks, there is still a broad array of other unilateral and bilateral cooperative measures that the two countries can and should explore.

[15] It is more than likely that the US defense community will at least explore possibilities to limit damage from China's use of nuclear weapons in the event of a conflict that escalates across the nuclear threshold. But broadcasting that likelihood would serve little purpose other than perhaps to assuage US Congressional and domestic critics of efforts to find cooperative strategic-nuclear risk reduction opportunities with China.

An Afterword on Whether to Acknowledge Mutual Vulnerability

In the final analysis, the question whether to acknowledge mutual vulnerability cannot be separated from the question of how to do so. As argued throughout this chapter, that "how question" is integrally related to the issue of what benefits, if any, could the United States reap from such an acknowledgement, and if those benefits would outweigh the costs of doing so. As suggested above, two of the most important benefits could be testing China's strategic intentions and working cooperatively with China to manage strategic-nuclear risks even in the context of greater competition. As a result, there are good reasons to take an approach which would fold acknowledgment—in the sense of acceptance—into an initial package of risk reduction measures from a new US-China official dialogue along the lines set out above.

Others will strike a different balance between the costs and risks of acknowledgment. They will argue that the United States should "say no." But there is no need to "say no" now. Instead, US officials could make clear their readiness to explore possible acknowledgement and acceptance of mutual vulnerability in the context of a meaningful dialogue to reduce the risks to both countries of increasingly adversarial strategic competition. This approach would shift the burden to China. It also would defer a final decision until an effort had been made to test China's strategic intentions. If meaningful dialogue and agreement on some initial strategic-nuclear risk reduction measures proves out-of-reach, acknowledgement of mutual vulnerability could be rejected at that time. By contrast, if the opposite occurs, the benefits would be considerable for both countries.

5

US-China Mutual Vulnerability: A Japanese Perspective

Masashi Murano

The potential acceptance by the United States of mutual vulnerability with China could have a wide range of spillover effects on regional security and stability, the defense posture of allies, and even proliferation for allies that benefit from US extended deterrence. The United States, therefore, should first engage its regional allies before moving forward with a bilateral discussion with China on this subject.

Tokyo's concerns about the possibility of a US-China mutual vulnerability acknowledgement are centered around questions regarding whether and how such a decision might erode overall deterrence of China and weaken the US commitment to defend Japan in the event of a Japan-China contingency. Addressing these issues is important because the solutions the US-Japan alliance can advance in response to Tokyo's concerns directly depend on the answers. This chapter will examine, from a Japanese perspective, the potential benefits, costs, and risks of the United States acknowledging mutual vulnerability with China and discuss various options that Tokyo and Washington can and should advance to strengthen deterrence.

The Problem of Mutual Vulnerability for Japan

The question of whether the United States should acknowledge mutual vulnerability with a nuclear-armed adversary is a unique geostrategic challenge for Japan. The concept of mutually assured destruction (MAD) and its (re)assurance measures to allies were developed in Europe during the Cold War. At the time, the United States and Western European countries, under the banner of the North Atlantic Treaty Organization (NATO), were outmatched by the conventional forces of the Soviet Union and Eastern European countries, which formed the Warsaw Treaty Organization (WTO). To compensate for its conventional inferiority, NATO relied on tactical or theater nuclear weapons; these are now referred to as "non-strategic nuclear weapons." In other words, by linking tactical, theater, and strategic nuclear weapons, NATO deterred the WTO from using its superior conventional forces, creating a seamless escalation ladder with allies under a "MAD situation."

The US-Japan alliance did not pay much attention to this issue during the Cold War, for two reasons. First, because Asia was a secondary theater; Europe was the priority. Second, unlike Europe, which was a land-based theater where NATO forces were not dominant, the Asian theater was air- and maritime-based, where the United States maintained conventional superiority. Therefore, the primary role of nuclear weapons in Asia during the Cold War was not to offset Soviet conventional superiority, but to deter Moscow from choosing the nuclear option to offset US conventional superiority.

Today, however, the Asian security environment is beginning to resemble the European environment during the Cold War. Rapidly developing Chinese conventional forces, particularly in strike options at the theater level, are increasingly putting the US-Japan alliance at a competitive disadvantage. The rising conventional strength of the People's Liberation Army (PLA) has makes it easier for Chinese law enforcement forces and maritime militias to act more boldly in the East and South China Seas.

To fill these gaps, the United States and Japan should focus on strengthening and beefing up their conventional and law-enforcement forces, both quantitatively and qualitatively. Yet while both countries are making efforts in that direction, there is no guarantee that those efforts will bear fruit given severe resource constraints and the "simultaneity" problem, i.e., the need for the United States to deter two major nuclear-armed competitors, China and Russia.

Until recently, Tokyo's main concern was China's gray-zone aggression against remote islands to the southwest, including the Senkaku Islands, and the conventional buildup that supports it. The impact of Beijing's *nuclear* buildup on US extended deterrence was only discussed by a limited number of experts.[1] These experts, however, have raised numerous concerns, especially if Washington opted to acknowledge publicly that the United States is now in a mutually vulnerable relationship with China.

Japanese concerns are about the "stability-instability paradox." This concept explains that when two countries share mutual vulnerability at the nuclear

[1] *China Security Report 2018: The China-US Relationship at a Crossroads* (Tokyo, Japan: National Institute for Defense Studies, 2018), Sugio Takahashi and Yukio Satoh, *US Extended Deterrence and Japan's Security* (Livermore, CA: Center for Global Security and Research, 2017).

level the probability of a direct nuclear exchange between them decreases but, paradoxically enough, that of limited conventional war increases.[2] Japanese worry that a US acknowledgement of mutual vulnerability with China could drive Beijing to be more aggressive conventionally in the East and South China Sea.[3]

This is a serious concern, especially given that Chinese military and paramilitary activities in the maritime and air domains surrounding Japan have grown and become more prevalent in recent years.[4] Consider the following: (1) the size of the China Coast Guard (CCG) is now more than double that of the Japan Coast Guard (JCG); (2) some CCG vessels have been converted into PLA Navy frigates, so they are superior to JCG patrol vessels in terms of firepower and protection; (3) CCG vessels are chasing Japanese fishing boats in and around Japan's territorial waters (and CCG vessels are conducting similar activities in the South China Sea); and (4) CCG vessels also escort Chinese fishing boats operating illegally in the East China Sea. A major issue is that it is impossible to distinguish between armed Chinese militias and Chinese fishing boats. Just like Russia, which deployed special forces known as the "Little Green Men" acting on its behalf to help annex Crimea in 2014, China has "Little Blue Fishermen." These fishing boats are equipped with positioning system receivers provided by the Chinese government, allowing Beijing to use them in a contingency or to assert its sovereignty by undermining Japanese administrative control. Significantly, a 2021 Chinese law also gives the CCG the authority to set ambiguous standards for the use of force, which deviate from the scope of the UN Convention on the Law of the Sea. In other words, the new law makes clear that Beijing is prepared to use force to change the status quo in the East China Sea.

Mutual vulnerability is a matter of degree. When the PLA Rocket Force began deploying mobile intercontinental missiles (ICBM) such as the DF-31, China became capable of making the continental United States vulnerable to a Chinese nuclear attack. That vulnerability, however, was limited because Chinese nuclear forces were small. This is changing as China is now moving beyond its minimal deterrence posture. In 2021, evidence surfaced that China was constructing over 250 new silos, believed to be for its DF-41 missile,[5] an ICBM that can carry up to 10 multiple independently targetable reentry vehicles (MIRVs).[6] The implications for US-China strategic stability are far-reaching since an ICBM force deployed in fixed silos is highly vulnerable to a first strike, suggesting these MIRVed ICBMs would be launched before they are destroyed, which could undermine crisis stability.

A US "Vulnerability Acknowledgement": Limited Benefits and Numerous Costs/Risks

One possible benefit of the United States acknowledging mutual vulnerability with China is that it could enhance arms-race stability at the strategic level. Efforts would include a variety of self-restraint measures by the United States. For example, Washington could choose not to invest in excessive strategic nuclear forces. Similarly, Washington could choose not to invest in US homeland missile defenses, particularly those that seek to prevent full-scale strategic attacks from China. Curtailing these investments may help Washington to increase its portfolio of forward-deployed conventional forces in the Indo-Pacific.

Choosing this path would involve major tradeoffs, however. First, the United States already maintains arms-race stability at the strategic level by anchoring quantitative nuclear parity with Russia through the New Strategic Arms Reduction Treaty, or New START. Yet when the Treaty's cap of 1,550 strategic nuclear warheads was made in 2010, the Chinese nuclear arsenal included approximately 200 warheads. Now some estimates suggest that it could

[2] Glenn Snyder, "The Balance of Power and the Balance of Terror," in Paul Seabury ed., *The Balance of Power* (San Francisco, CA: Chandler, 1965).

[3] Taku Ishikawa, Hokuto ajia ni okeru senryakuteki antei to nichi-bei no yokushi Taisei ("Strategic Stability" and US-Japan Deterrence Posture in Northeast Asia), Kaigai-Jijo (Journal of World Affairs), Takushoku University, May 2013.

[4] For example, see the following: Ministry of Foreign Affairs Japan, *Trends in China Coast Guard and Other Vessels in the Waters Surrounding the Senkaku Islands, and Japan's Response*, January 18, 2022.

[5] For example, see Joby Warrick, "China is building more than 100 new missile silos in its western desert, analysts say," *Washington Post*, June 30, 2021, and Matt Korda and Hans Kristensen, "A Closer Look at China's Missile Silo Construction," *Federation of American Scientists*, November 2, 2021.

[6] Whether it can carry 10 MIRVs merits additional analysis. In general, the throw weights of solid-fueled missile are smaller than those of liquid-fueled missile of the same size. The DF-41 is a three-stage solid-fuel missile, but its size is smaller than the DF-5; the DF-5B is the most powerful liquid-fueled PLARF missile, but it carries only five warheads. The DF-41 is almost the same size as the MX/Peacekeeper, but the W87 warhead on the Peacekeeper weighed at most 270 kg per warhead. Since the lightest nuclear warhead confirmed in China is 450 kg, the DF-41 may carry 10 warheads, it would need a lighter warhead design or a more energetic propulsion design than the DF-5B. The DF-41 is likely capable of carrying multiple MIRVs and supporting penetration aids.

reach up to 1,000 by the 2030s. Assuming that these estimates are accurate (and assuming the Washington and Moscow maintain their strategic nuclear forces at 1,550 each), the United States would be outnumbered: it would have to deter Russia and China, which together would have 2,550 warheads, against 1,550 warheads. This is an especially serious challenge as China and Russia are expanding and deepening their strategic collaboration.

Second, China and Russia are not the only nuclear-armed adversaries that the United States must deter. A major problem is that acknowledging mutual vulnerability with China may lead the United States to limit missile defenses, which are designed to intercept limited attacks from countries such as North Korea and Iran.[7] Yet limiting such defenses may lead to a de facto increase in US-North Korea mutual vulnerability, especially given that Pyongyang has been expanding and improving its nuclear arsenal in recent years.[8] Such a development would undermine the credibility of US extended deterrence in Northeast Asia, and both Japan and South Korea would feel more insecure.

"A major problem is that acknowledging mutual vulnerability with China may lead the United States to limit missile defenses, which are designed to intercept limited attacks from countries such as North Korea and Iran."

Third, Japan's key concern, as mentioned, is the stability-instability paradox. China's increasingly assertive posture and actions are the result of China's buildup of its conventional and law enforcement forces. But there is a connection to nuclear deterrence. If Beijing believes that it can control escalation at the strategic-nuclear level, it is more likely to increase its assertive and even aggressive actions vis-à-vis Tokyo (as well as Taipei). This is especially concerning both because Beijing has already ramped up its activities at the conventional and sub-conventional levels and because it has an overwhelming advantage in both the conventional and nuclear realms when it already comes to theater-range strike capabilities.

Fourth, there is potential instability at the theater-level nuclear force posture. Despite withdrawing from the Intermediate-Range Nuclear Forces Treaty (INF) in 2019, the United States has not deployed ground-based theater nuclear forces in the Western Pacific. Only US strategic bombers can be deployed from the US homeland or Guam if there is a crisis. Also, the United States does not rule out the forward deployment of dual-capable aircrafts to Japan and South Korea, but these assets are vulnerable to preemptive strikes. The only exception is an underwater-based theater nuclear force, but the United States has only deployed "small numbers" of low-yield submarine-launched ballistic missiles (SLBM), and the Biden administration wants to cancel the nuclear-tipped sea-launched cruise missile program.

By contrast, most of PLA's deployed theater-range missile forces are dual-capable. Given its superiority at the conventional level, China should have a higher threshold for nuclear use at the theater level than Russia or North Korea. Yet despite the growing precision strike capability of its missile forces, the PLA maintains an improved capability to "hot-swap" conventional and nuclear warheads on the DF-26, suggesting that Beijing may intend to "escalate to de-escalate" in a crisis.

Limited US theater level, low-yield nuclear options is thus problematic, and stability at the strategic level would further lower the threshold for China to make nuclear threats at the theater level. Plainly, the balance of forces at the higher levels of the escalation ladder casts a shadow over the balance of forces at the lower levels, and that shadow affects the entire ladder. Therefore, the negative impact of the stability-instability paradox should not be underestimated.

[7] US Department of Defense, Ballistic Missile Defense Review, 2010.

[8] In 2017, North Korea developed a thermonuclear warhead and an Hwasong-15 (HS-15) ICBM capable of striking the US homeland. At the October 2020 military parade, North Korea also unveiled the Hwasong-17 (HS-17), larger than the HS-15. In a test launch in March 2022 in a lofted trajectory, it demonstrated its tremendous power output, which was enough to cover the entire United States. Furthermore, given Kim Jong-un's stated interest in developing MIRVs, the number of nuclear warheads that North Korea can project toward the US homeland will increase in the foreseeable future, possibly as rapidly as China. North Korea's ICBM arsenal is no longer "limited."

Costs and Risks of Reassurance

Besides issues pertaining to deterring China in a context in which US-China mutual vulnerability increases, there has been a growing unease in Japan about US extended deterrence. One source of this anxiety is the Biden administration's preferences for reducing the role of nuclear weapons in US security policy and considering the adoption of a "sole purpose" and even a "no-first use" (NFU) policy. In the past, the United States has systematically rejected these policies.

While these issues may seem irrelevant to the mutual vulnerability question with China, they are closely related. Adoption of these policies, combined with a US acknowledgment of mutual vulnerability, would affect the US strategic force posture because they would likely cap investments in nuclear modernization and missile defense. US Senators Adam Smith and Elizabeth Warren, for instance, have introduced legislation to that effect.

It is not yet clear what declaratory policy and force posture the Biden administration's forthcoming *Nuclear Posture Review* will adopt. The US debate surrounding the adoption of a sole purpose or NFU policy, however, have already undermined the credibility of the US extended deterrence in the eyes of many allies, including Tokyo's.[9]

To be sure, the Biden administration has repeatedly confirmed in high-level meetings with Japanese that the credibility of US extended deterrence, including extended *nuclear* deterrence, is robust. For example, the Joint Statement of the Security Consultative Committee ("2+2") of January 2022 says that "The United States restated its unwavering commitment to the defense of Japan under the US-Japan Treaty of Mutual Cooperation and Security, using its full range of capabilities, including nuclear. The two sides affirmed the critical importance of ensuring that U.S. extended deterrence remains credible and resilient."[10]

Despite these robust joint statements, however, skepticism about the credibility of US extended deterrence is growing in Japan. Several politicians, including former Prime Minister Shinzo Abe insist that Japan should revise its three "non-nuclear principles" and that Japan and the United States should discuss nuclear sharing arrangements.[11]

Much of this debate in Japan was energized by the Biden administration's response to Russia's invasion of Ukraine.[12] As soon as the crisis began, President Biden made it clear that he would not deploy US troops to defend Ukraine (because it is not a NATO member), and he repeatedly stressed that the United States wanted to avoid a conflict with Russia, for fear that it could escalate into World War III, and include the use of nuclear weapons.[13]

"Despite these robust joint statements, however, skepticism about the credibility of US extended deterrence is growing in Japan. Several politicians, including former Prime Minister Shinzo Abe insist that Japan should revise its three 'non-nuclear principles' and that Japan and the United States should discuss nuclear sharing arrangements."

If President Biden's red line had been that Ukraine is not a US ally with which the United States has defense commitments, Tokyo would have been reassured. Japanese would have thought: "We are not like Ukraine, we are a more important, formal ally of the United States." Biden, however, has been primarily concerned by the risk of nuclear escalation. This is worrisome to Japanese given that that risk will

[9] Demetri Sevastopulo and Henry Foy, "Allies lobby Biden to prevent shift to 'no first use' of nuclear arms," *Financial Times*, October 29, 2021.
[10] US Department of State, "Joint Statement of the US-Japan Security Consultative Committee ("2+2")," January 6, 2022.
[11] Ryoto Imao and Miki Nose, "Abe reiterates nuclear-sharing discussion is necessary," *Nikkei Asia*, March 3, 2022, and Rintaro Tobita, "Senior Japanese lawmakers eye 'nuclear sharing' option with US," *Nikkei Asia*, March 12, 2022.
[12] "A New Nuclear Debate in Japan," *Wall Street Journal*, March 1, 2022.
[13] Aaron Blake, "Why Biden and the White House keep talking about World War III," *Washington Post*, March 17, 2022.

be present whether confronting China, and even North Korea.

The US government should be prepared to control escalation even in the event of Russia's nuclear blackmail. Yet it appears that President Biden is not willing to do so. Russian President Vladimir Putin's nuclear threats have deterred a US/NATO military intervention.

Some Americans may believe that if the United States takes the lead in reducing the role of nuclear weapons, other countries will follow suit. Russia, China, and North Korea, however, have not done so. On the contrary, they have increased their nuclear and missile capabilities both qualitatively and quantitatively. If the United States turns a blind eye to this harsh reality, it will lose the trust of its allies. In this context, acknowledging mutual vulnerability with China, the reassurance of US allies, including Japan, would be further undermined.[14]

The Way Forward

Efforts to Restore Conventional Superiority

To better deter China and, at the same time, better assure Japan, the United States should expand its defense commitments at the conventional *and* gray-zone levels. The most difficult challenge is to deter not just conventional armed aggression, but the probing that does not lead to armed conflict but attempts to establish a fait accompli through continued limited pressure campaigns. To be sure, the JCG and Self Defense Forces (SDF) are primarily responsible for dealing with gray-zone aggression, including law enforcement within the administrative control area.

Partial US support for peacetime operations would help reduce the burden of presence and patrol operations by the JCG and SDF. The United States could also deploy more maritime Intelligence, Surveillance, Reconnaissance and Targeting (ISR&T) assets to Honshu and the Southwest Islands, and US naval platforms could increase the frequency of their operations.

Moreover, the US Cyber and Space Commands should work more closely with the JCG and SDF to conduct integrated and combined joint exercises that envision peacetime, gray zone, and armed conflict. This is important because law enforcement infrastructure as such satellite navigation, communications, and command and control systems, which are essential to JCG to conduct peacetime and gray zone operations, depends on the stable control of space, cyberspace, and the electromagnetic spectrum. If these infrastructural capabilities were disrupted by China, the JCG lacks the capability to restore the degraded maritime domain awareness on their own. In short, restoring these capabilities will require the military sector to support resilient operational infrastructure, deter them from being interfered with cross-domain, and take countermeasures to minimize damage in the case of interference.

Strengthening the integrated strike capabilities of Japan and the United States is also critical. There are two types of offensive strike capability to consider. The first is anti-ship cruise missiles. If Japan and the United States deployed ground-based anti-ship cruise missiles, which are highly survivable and long range, Chinese naval vessels will likely be deterred from approaching land bases in Japan. Significantly, the Japanese Ministry of Defense is developing enhanced variant Type 12 Surface-to-Ship Missiles that have an estimated range of 750-1,000 kilometers, but they are not scheduled to be deployed until 2026 or later. To fill this gap, the United States should consider releasing to Japan the Maritime Strike Tomahawk and the SM-6 with ship attack capability. Furthermore, to operate the SDF's long-range SSMs, they must be synchronized with the Air Self-Defense Force's anti-ship missiles, and the Tomahawks and SM-6s operated by US ground forces to enable a saturation attack from multiple-direction on a single target with high-speed data link will be needed. These linkages should be coordinated as soon as possible with the unmanned aerial vehicles that the United States is beginning to deploy for maritime ISR.

The second type of long-range strike capability to consider is ballistic missiles or hypersonic glide vehicles that can degrade PLA Air Force's offensive counter-air capabilities.[15] If Japan-US forces can hold these targets at risk, that would lead in an improved air combat situation for Tokyo and Washington in the East China Sea and around Taiwan. Medium-range ballistic missiles (MRBMs) with a range of 2,000 kilometers or Long-Range Hypersonic Weapons

[14] Bryan Bender, "Biden team weighs killing Trump's new nuclear weapons," *Politico*, January 12, 2022.

[15] Masashi Murano, "The Japan-US Alliance in a Post-INF World: Building an Effective Deterrent in the Western Pacific," *nippon.com*, December 18, 2019.

(LRHWs) could be deployed in Kyushu and strike targets up to 1,000 kilometers inland from the Chinese coastline within 13 minutes after launch. On the other hand, an intermediate-range ballistic missile (IRBM) with a range of 4,000 kilometers can strike a similar target in about 20 minutes, even if the launcher is deployed at a training ground in Hokkaido.

Currently, neither the United States nor Japan has a specific research and development program for IRBM-class strike systems. However, given the political difficulties of pre-positioning large numbers of launchers and ammunition in the southwest area in Japan, it is well worth considering extending the range of missiles and carrying larger, more lethal payloads even if they are conventionally armed. The United States and Japan should launch a longer-range ballistic missile program or a hypersonic glide program as soon as possible, and obstacles to technical cooperation between the two countries to make this happen need to be removed quickly.

What Role for Nuclear Weapons to Enhance Deterrence and Reassurance?

The best way to respond to the stability-instability paradox is to restore conventional superiority, but this is easier said than done. Japan should increase its defense spending to the 2% of GDP level, just as NATO countries have done in the wake of the rising Russian threat.

Japan's defense budget growth rate, however, is about 1% per year. This is marginal compared to China's defense spending growth, which for FY2020 increased by 5.2% over the previous year. Similarly, the US fiscal deficit is expected to widen in the wake of the COVID-19 pandemic, and defense budget constraints will grow. Russia's invasion of Ukraine will also likely further restrain US efforts to rebalance to the Indo-Pacific. It will become increasingly difficult for the United States to secure sufficient conventional forces to deter and, if needed, defeat China and Russia simultaneously. The time needed to restore the conventional force balance, or strike gap, in the Indo-Pacific means that the United States and its allies may first have to increase their reliance on theater nuclear forces, as NATO did during the Cold War.

"The United States and Japan should launch a longer-range ballistic missile program or a hypersonic glide program as soon as possible, and obstacles to technical cooperation between the two countries to make this happen need to be removed quickly."

However, the dual capable aircraft (DCA)-based deterrence posture, as practiced in NATO, does not apply well to the current US-Japan alliance. [16] Globally deployable DCAs can deliver a B61 variant, one of the existing low-yield nuclear bombs, and its visibility is effective as a deterrent signal. Yet, given the increase in theater-range missile threats coming from China (and North Korea), the United States and its allies will need to re-evaluate the risks of deployment of DCAs to nearby forward bases in Japan and South Korea, and even in Guam, when military tensions rise. In addition, since US dual capable stealth assets such as the F-35 are hard to detect and intercept in the air, adversaries have an incentive to use their theater-range strike capabilities early in a confrontation. This is because detection and neutralization have a much higher probability of success while such assets are on the ground.

The vulnerability of DCAs and the associated risks to crisis stability are one of the reasons why it is inappropriate for Japan (and South Korea) to adopt a NATO-type nuclear sharing arrangement. Especially if B61 nuclear bombs must be stocked in a hardened ammunition depot like in Kleine Brogel Air Force Base in Belgium and Buchel Air Force Base in Germany, the incentive for adversaries to launch a first strike on these nuclear weapons will increase.

Other low-yield options such as B61-12 and Long Range Stand Off weapons are delivered by DCAs and strategic bombers. Their response, however, would be too slow to carry out disarming strikes against time-sensitive targets; for DCA to reach mainland China, it takes more than an hour from Japan. A Trident SLBM launched from Guam's ocean,

[16] This analysis is based on Masashi Murano, "What the New US Nuclear Posture Means for Northeast Asia," *The Diplomat*, August 29, 2018.

however, should be able to destroy targets located mainland China within 18 minutes.

Sea-based, survivable low-yield nuclear option such as Trident D5 with W76-2 as well as SLCM-N have different roles and characteristics than air assets. According to estimates by the US Indo-Pacific Command, China has already gained a significant temporal advantage over the United States in terms of the forces it can rapidly deploy in the Western Pacific. Also, even if China and the United States and/or Japan were to conduct electronic and cyberattacks against each other's ISR capabilities, and both of their precision strike capabilities were to be degraded, China has a wide-range strike option, such as airstrip networks in Japan, using cluster warheads that can be carried on DF-16Bs and other platforms. Because it is a party to the Convention on Cluster Munitions, Japan does not have such a conventional wide-range strike option.

A low-yield SLBM can be launched from anywhere in the ocean, taking advantage of its high accuracy and long range to choose a trajectory. Furthermore, if ballistic missile submarines approach the target before launch, they can shorten the time to impact, and reliably penetrate the adversary's air defense. In addition, the guidance system of Trident D5 does not rely on satellite navigation, so it is not affected by jamming and is very resilient.

Until the United States and its allies can deploy sufficient conventional prompt strike systems such as MRBMs, IRBMs, or hypersonic glide vehicles in the region to offset this temporal disadvantage, the low-yield SLBM and SLCM-N will play an essential role to manage escalation.

Upgrading the Nuclear-Conventional Integrated/Combined Planning Process

Even if nuclear sharing is not necessary, upgrading decision-making and operational planning processes are urgently needed to ensure appropriate deterrence in peacetime to deal with gray-zone and conventional challenges and to manage nuclear escalation.

In the event of a conflict with China, if Japan and the United States attacked the PLA's dual-capable missiles and their associated command and control and communications nodes with conventional weapons, China could perceive it as an attack on its nuclear forces and decide to escalate to the nuclear level. Also, even if Japan and the United States do not attack mainland China but conduct a pressure campaign involving economic sanctions or a distant blockade, China may threaten nuclear escalation.

Therefore, managing cross-domain escalation is essential. There are several steps that Japan and the United States should take in this regard.

First, they should work together to gauge the threat, assess their joint capability (with respect to targets, weapons systems, deployment sites, logistical support and so forth), identify capability gaps, and optimize the allocation of roles, missions, and capabilities.

Second, Japan and the United States should establish a common operational picture and a joint targeting coordination board. To manage escalation, Japan should be a proactive and responsible partner in drafting and implementing an operational plan detailing when, how, and for what targets US forces would conduct strike operations. The SDF's involvement in US operational planning would also reduce the political risks of deploying US ground-based systems to Japan.

"To manage escalation, Japan should be a proactive and responsible partner in drafting and implementing an operational plan detailing when, how, and for what targets US forces would conduct strike operations."

Third, Japan and the United States should upgrade their extended deterrence dialogue to a high-level consultative framework at the ministerial level and improve the nuclear-conventional integrated/combined planning process. Linking the agenda of the Extended Deterrence Dialogue with the joint operational planning process through the US-Japan Bilateral Planning Committee would seamlessly construct an escalation ladder from the gray-zone to the conventional and nuclear domains, leading to more specific nuclear options in the defense of Japan. On that basis, there should be US-Japan joint exercises that include not only US Indo-Pacific Command, but also US Strategic Command

and high-level political leaders, to test assumptions and improve cooperation. These activities should focus especially on the risks associated with forward-deployed DCA and strategic bombers in time of crisis and the frequency of deployment of ballistic missile submarines to Guam and the use of low-yield SLBMs against time-sensitive targets.

Conclusions

A US acknowledgement of mutual vulnerability with China would have far-reaching consequences. It would likely give Beijing the sense that it can be more aggressive conventionally and it would also likely require the United States to make significant concessions on its force posture. As a close US ally, Japan stands to lose out from such a development. Still, as it increases its ability to threaten the United States, China's confidence will rise and it will likely become more assertive, regardless of what Washington says about mutual vulnerability. Japan should come to grips with that harsh reality. In these circumstances, Tokyo should urge Washington to double-down on strengthening deterrence of China, and it should assist wherever it can. It is essential that Japan and the United States work together to manage escalation ladder from the gray-zone to the conventional and nuclear levels in the Western Pacific, and that they update the integrated/combined planning mechanisms to support these efforts.

6

US-China Mutual Vulnerability: A South Korean Perspective

Seong-ho Sheen

There is currently not much debate about US-China strategic competition and the emerging nuclear dynamic between Washington and Beijing in South Korea. China has emerged as an increasingly important economic and political partner for South Korea, and the two countries are preparing to celebrate the 30th anniversary of the normalization of their relations, which dates back to 1992. True, Beijing's assertive diplomacy and heavy-handed economic retaliation in 2016 in response to Seoul's acceptance of the deployment of a US missile defense system on its territory soured the bilateral relationship. It also served as a wake-up call for South Koreans that US-China relations can have an impact on the Korean Peninsula. Still, most South Koreans do not see China's rise, and its nuclear build-up, as a direct threat to their national security. Instead, Seoul is focused on the North Korean nuclear issue, the US-North Korea dance between deterrence and diplomacy, and China's actions in this regard. Seoul is also concerned about the credibility of US extended deterrence to address the mounting North Korean nuclear threat. Simply put, Seoul remains committed to reducing its own perceived vulnerability to Pyongyang's nuclear program and balancing its relationship with Beijing and Washington for its own security and economic interests. In that context, China's increasingly assertive regional posture and US-China nuclear competition have not been at the forefront. A discussion about US-China mutual vulnerability, therefore, has yet to happen in Seoul.

THAAD Deployment and its Aftermath

While enjoying flourishing relations with both the United States and China, South Korea first got a taste of the problem of rising US-China strategic competition when it consented to the deployment of a US Terminal High Altitude Area Defense (THAAD) missile defense battery on its soil after North Korea's fourth nuclear test in January 2016. Following months-long consultations with the United States, the South Korean government announced that THAAD would be installed as a "defense measure to protect the people of South Korea and the armed forces of the South Korea-US alliance." Seoul was careful with Beijing, stressing that the system will target only the threats coming from North Korea and insisting that "it will not be directed against a third party."[1] What's more, South Korea and the United States argued *jointly* that THAAD was purely defensive and meant to respond to the North Korean nuclear threat.

In response, the Chinese government expressed "strong dissatisfaction and firm opposition," reflecting Beijing's concern about the strategic implications of THAAD for US-China strategic competition. Beijing suspects that THAAD can detect not only North Korean, but also Chinese missiles. In other words, Beijing suspects that THAAD could contribute to undermining China's strategic deterrent against the United States, especially given the small size of its arsenal. Beijing also fears that THAAD could jeopardize its strategy of using medium-range missiles against the United States in case of regional conflict. Moreover, Beijing is concerned that THAAD may be a first step toward the deployment of an integrated US-led missile defense system in Northeast Asia, one which would include both South Korea and Japan; the latter, after all, has already deployed US systems on its soil. The prospects of increasingly close military coordination and cooperation between South Korea and Japan, notably when it comes to deterrence, is an additional area of important concern for Beijing.

China, then, targeted the South Korean economy in retaliation. The unofficial but highly effective measures included a ban on South Korean shows, movies, and celebrities on the Chinese market, the shutdown of Chinese tourism in South Korea, and various penalties on South Korean consumer goods. Among others, Beijing launched a massive action against Lotte, a South Korean retail giant, which provided its golf course in the southeastern county of Seongju as a deployment site for THAAD. As a result, 87 of Lotte's 112 hypermarket stores in China were shut down and its construction projects were stalled. According to one estimate, the South Korean conglomerate suffered $2.2 billion in losses.[2]

China's multi-year economic pressure campaign against South Korea forced both the elites in Seoul and the public to realize that an ever-closer relationship with China comes with risks. Opinion surveys showed that Beijing's favorability rating

[1] "ROK-US, The Decision to Deploy THAAD to USFK Has been Reached," ROK, Ministry of National Defense, July 8, 2016 https://www.mnd.go.kr/user/newsInUserRecord.action?command=view&newsId=I_669&siteId=mnd&page=1&id=mnd_020400000000&newsSeq=I_9465

[2] Darren J. Lim, "Chinese Economic Coercion during the THAAD Dispute," The Asan Forum, December 28, 2019, https://theasanforum.org/chinese-economic-coercion-during-the-thaad-dispute/; Yonhap News, November 01, 2017, https://www.yna.co.kr/view/AKR20171031179500030

among the public plummeted; it hit an historic low of 24% in 2020. A survey conducted by the Chicago Council on Global Affairs in March 2021 showed that most South Koreans viewed China as an economic and military threat, although, significantly, they consider it to be a lower priority threat than falling birth rates, climate change, and North Korea.

These concerns have given Seoul a strong incentive and some political space to push back against China. For instance, during their first summit in May 2021, US President Biden and South Korean President Moon issued a joint statement considerably more critical of the Chinese government's behavior than any previous document. They stated that the two countries opposed "all activities that undermine, destabilize, or threaten the rules-based international order," and voiced their commitment to maintain peace and stability and defend international rules and norms in the South China Sea and Taiwan Strait.[3] It was the first time a South Korean-US joint statement included a reference to Taiwan. In response, China's Ministry of Foreign Affairs spokesperson noted that "the Taiwan question is China's internal affair" and warned both Washington and Seoul to "refrain from playing with fire."

Notwithstanding these developments, however, it is unlikely that South Korea will embrace an overtly competitive approach to China, at least not in the near term. Following the Moon-Biden summit, for instance, South Korean Foreign Minister Chung Eui-yong sought to reassure Beijing that Seoul was not "interfering in China's internal affairs." The basic tenor of South Korea's China policy may be changing slightly, but Washington should not expect a drastic shift. It would be counterproductive for Washington to push too hard for Seoul to take a tougher approach on China. Doing so would likely strain the South Korea-US alliance. While it has accepted the THAAD deployment (and, again, made every effort to clarify its purpose and function as a defensive measure solely against the North Korean nuclear threat), Seoul has no interest in alienating Beijing given its sizable importance to the South Korean economy. Another reason is that Seoul wants Beijing to help denuclearize North Korea, which ostensibly would remove any need for missile defenses on the Korean Peninsula.

Factors Shaping the South Korea's Debate, Generally and in the Strategic Nuclear Domain Specifically

Unlike Japan, South Korea currently does not see China as much of a direct threat to its security. As much as Seoul values its alliance relationship with the United States, it cares more about the growing Chinese economic and political influence on the Korean Peninsula. China has become South Korea's biggest trading partner, with an annual trade volume that is larger than with the United States and Japan combined, its second and third largest trading partners. Significantly, its trade surplus with China is considerably larger than the ones it has with the United States and Japan. So, despite China's actions against South Korea over the THAAD deployment, trade with China remains of utmost importance to South Korean economy. Note, for instance, that in 2021 South Korean exports to China gained over 13%.[4]

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To be sure, the recent US-China trade war has created a strain on many South Korean companies for which China represents a major export market and business partner. As a result, there have been growing concerns in the South Korean business community that South Korea could become a hostage to US-China strategic competition and be forced to choose its favorite between Washington and Beijing on many critical issues, such as supply chains, for instance.

[3] The White House, US-ROK Leaders' Joint Statement, May 21, 2021, https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/21/u-s-rok-leaders-joint-statement/

[4] Joori Roh, "S. Korea exports grow at slowest in 11 months, trade deficit hits record," *Reuters*, Jan. 31, 2022.

Fundamentally, however, nothing has changed: South Korea continues to value its economic relationship with China. That will not change in the foreseeable future.

Beyond economics, Seoul also cares about China's influence on the Korean Peninsula, notably its role in shaping nuclear and peace talks with North Korea. Recall that Chinese President Xi Jinping met North Korean Chairman Kim Jong Un five times in 2018 and 2019; last year, Beijing and Pyongyang celebrated the 60th anniversary of their mutual friendship and military partnership treaty. Beijing, of course, is the biggest supplier of food and energy to a much impoverished and isolated North Korea today. So, in theory, China can help solve the crisis on the Korean Peninsula and, from Seoul's perspective, this is invaluable given how fundamental this issue is for South Korea.

"Beijing, of course, is the biggest supplier of food and energy to a much impoverished and isolated North Korea today. So, in theory, China can help solve the crisis on the Korean Peninsula and, from Seoul's perspective, this is invaluable given how fundamental this issue is for South Korea."

Yet, if China showed more aggressiveness toward South Korea, Seoul's strategic calculation could change. Over the past few years, China's claims that the ancient Korean kingdom on the China-Korea border is part of Chinese history ignited a huge public uproar in South Korea, leading to bilateral tensions. More recently, some Chinese claims that Korean cultural heritage such as the Korean Hanbok, a traditional costume, and Kimchi are of Chinese origin have led to a culture war on social media. As a result, the South Korean public perception of China is at an all-time low these days, even despite Seoul's (and Beijing's) efforts to mend their relationship after the THAAD controversy. Some future dispute over history, territory, or fishing rights near the waters of the Korean Peninsula could then derail the relationship completely. Besides, Beijing's coercive diplomacy and provocative actions in the East and South China Seas, notably over "freedom of navigation" and other sovereignty issues, raise many and increasing concerns in Seoul. In this context, rising US-China rivalry in the nuclear domain could also, down the line, force South Korea to think about the implications for its security of a nuclear arms race in the region.

Until recently, China maintained a small nuclear arsenal based on minimum deterrence and a no-first use doctrine. Chinese nuclear forces remained extremely small in comparison to those of the United States and Russia. For a long time, Chinese nuclear forces were well under 300 nuclear warheads, compared to nearly 2,000 deployed nuclear warheads of the United States (and as many in storage). Chinese nuclear forces also did not consist of a nuclear triad; they included only land-based ballistic missiles. Still today, China does not have fully operational nuclear sea-leg platforms or a strategic bomber fleet. In addition, Beijing has few strategic nuclear weapons able to target the US mainland.

This is changing, however, and rapidly. Of late, new evidence has surfaced suggesting that China is upgrading its nuclear arsenal much more significantly and much faster than anticipated. According to the SIPRI yearbook 2020, China's total inventory of nuclear warheads has reached 320, exceeding those of United Kingdom and France. That is significant because London and Paris pursue limited deterrence, not minimum deterrence.[5] While still considerably below US and Russian warhead numbers, Beijing seems to be in nuclear-build-up mode. The latest US DoD report projects that China may have up to 700 deliverable nuclear warheads by 2027 and up to 1,000 warheads by 2030, exceeding the pace and size the DoD projected in 2020.[6]

What's more, China has intensified its efforts to compete against the United States in the strategic nuclear domain. For instance, Beijing has developed

[5] Stockholm International Peace Research Institute (2020), World Nuclear Forces. In 'SIPRI Yearbook 2020' (pp. 325-393), https://www.sipri.org/sites/default/files/YB20%2010%20WNF.pdf

[6] US Department of Defense, "Military and Security Developments Involving the People's Republic of China 2021," p. viii, https://media.defense.gov/2021/Nov/03/2002885874/-1/-1/0/2021-CMPR-FINAL.PDF

Multiple Independently Targetable Reentry Vehicle (MIRVs) and Maneuverable Reentry Vehicle (MARVs). Its intercontinental ballistic missile (ICBM) DF-41 is capable of carrying up to ten MIRVs, while its Medium-Range Ballistic Missile (MRBM) DF-21D could carry a MARV warhead, posing significant challenges to US missile defenses. China has also been building its fleet of nuclear attack submarines and nuclear submarine launched ballistic missiles (SLBM). It has built six Jin class SSBNs, with four operational and two outfitting at Huludao Shipyard. China's Jin SSBNs, which are equipped to carry up to twelve CSS-N-14 (JL-2) SLBMs, are now the country's first viable sea-based nuclear deterrent. China is also building next-generation nuclear submarines with newer, more capable, and longer ranged SLBMs that can target the United States from littoral waters in the Pacific.[7] If China's nuclear build-up and related actions lead to a nuclear arms race with the United States, concerns will rise quickly in Seoul because South Koreans will begin to wonder what the implications are or could be for Northeast Asia and for them in particular.

Acknowledging Mutual Vulnerability Versus Strategic Ambiguity

There are growing concerns that US-China rivalry could create a problem for South Korea's foreign and economic policies. For now, these concerns have not led South Korea to regard China as a threat. Despite the findings of the US DoD report emphasizing China's aggressive nuclear weapons development, this topic has yet to emerge as a major focus for the South Korean public and policymakers. The THAAD controversy with Beijing was a wake-up call but is largely understood in Seoul in the context of dealing with North Korea's nuclear threat.

Clear signs of an emerging Cold War style strategic nuclear arms race between Washington and Beijing would lead South Korea to be much more concerned about the implications for the Korean Peninsula, and for regional security more generally. What's more, the South Korean public and the national security policy community in Seoul will get into a serious debate about the pros and cons of US nuclear policy decisions and approaches vis-à-vis China. With regard to a US acknowledgement of mutual vulnerability with China, Seoul will likely see benefits if its effect is the stabilization of US-China strategic nuclear relationship. In particular, if such an acknowledgement reduces the incentives for Beijing to expand and improve its nuclear forces, there will be a direct benefit for South Korea, which does not want to live next to an increasingly nuclear-capable neighbor.

At the same time, a US acknowledgement of mutual vulnerability with China could also turn out to be a cost for South Korea if its effect is to embolden China and lead to more assertive or, worse, aggressive Chinese behavior in the region. If Chinese officials read such an acknowledgement as a signal that Washington may not intervene forcefully to help address regional disputes because it fears nuclear escalation, Beijing may become more confrontational as a result, not just in the military domain but also to settle economic and trade disputes, or to address other historical and cultural issues related to past wars, with South Korea and others.

From a South Korean perspective, the most concerning outcome would involve China taking more aggressive actions over fishing rights in the Yellow Sea, the territorial disputes in the South Sea, and the Korean Air Defense Identification Zone. Seoul, in other words, may begin to have the same concerns with China that it has long had with North Korea, i.e., that China will become militarily provocative against South Korea and others. Seoul may also worry about the impact on the approach to North Korea. South Koreans may become concerned that Washington will be less committed to providing military support or even to intervening in the event of a military contingency on the Korean Peninsula if China objects to it. Recall that in the aftermath of the 2010 sinking of a South Korean patrol ship, the Cheonan, by North Korea, Washington announced a joint military exercise with the South Korean Navy and a US aircraft carrier in the West Sea as a show of force and a signal of US military commitment and support to South Korea. Yet, when Beijing strongly objected to the introduction of a US aircraft carrier to the West Sea, arguing that it would increase tensions and pose a direct threat to China's security, the joint naval exercise was instead held in the East Sea. For many South Koreans, bowing to Chinese objections was problematic and raised serious concerns about

[7] US Department of Defense, "Military and Security Developments involving the People's Republic of China 2020," pp. 86-87, https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/1/2020-DOD-CHINA-MILITARY-POWER-REPORT-FINAL.PDF

the US commitment to the alliance.[8] One possible consequence of a US acknowledgement of mutual vulnerability with China is greater deference to Chinese demands and, therefore, growing doubts in Seoul about the US commitment to guaranteeing regional security.

These developments would, without doubt, force South Koreans to regard China as a serious threat and reflect on the implications of Chinese nuclear forces. South Koreans would want to rely more on the US nuclear umbrella, while at the same time feel increasingly worried about US capacity to provide effective extended deterrence. A US acknowledgement of mutual vulnerability could be seen as exacerbating that concern. South Koreans would wonder if the United States was prepared to defend Seoul even though it meant risking that Washington or New York could become targets of a Chinese nuclear attack.

Should the United States refuse to acknowledge mutual vulnerability with China, the cost-benefit analysis would be vastly different for South Korea. The obvious benefit would be a signal to South Korea that the United States is determined to check China's growing military power. From Seoul's perspective, a direct result would be a stronger US extended deterrence vis-à-vis China and North Korea. The risk, however, would be that a US refusal to acknowledge mutual vulnerability with China could drive Beijing to double down and further expand its nuclear arsenal. In these circumstances, South Korea would have to face an increasingly nuclear-capable China, presumably with a doctrine that extends well beyond minimum deterrence. This would be immensely problematic for Seoul because the odds of South Korea getting sucked into an intensifying US-China strategic rivalry would increase significantly.

Regardless of what the United States decides to do with regard to mutual vulnerability, the trendlines suggest that more voices will emerge in South Korea in favor of the development of independent nuclear weapons. Since North Korea conducted its first nuclear test in 2006, key members of the conservative parties have questioned the credibility of US extended deterrence and deplored the asymmetric security environment on the Korean Peninsula—with South Korea only possessing conventional weapons—and argued Seoul should now pursue nuclear options.[9]

US extended deterrence has become a focus of foreign policy discussions in the recent presidential election campaign. During the opposition People's Power Party (PPP) primary debate, major candidates had heated exchanges on the topic. Yoo Seung-min, a former member of the National Assembly, and one of the candidates, proclaimed, "it is unrealistic to prevent us from our own nuclear armament when North Korea has not given up its nuclear weapons yet." Yoon Seok-youl, who later became the PPP party candidate (and is now South Korea's president), also said that he would ask Washington to redeploy tactical nuclear weapons or agree to a nuclear-sharing arrangement similar to the one in place in Europe (by the North Atlantic Treaty Organization, NATO) if South Korea continued to be threatened by North Korea.

"Regardless of what the United States decides to do with regard to mutual vulnerability, the trendlines suggest that more voices will emerge in South Korea in favor of the development of independent nuclear weapons."

For his part, the governing Democratic Party candidate and governor of Kyunggi province, Lee Jae-myung, expressed his support for current US-ROK extended deterrence, criticizing the argument for tactical nuclear weapons as "dangerous populism aimed to get more votes by misusing the national security situation." From his perspective, an independent South Korean nuclear weapon capability is neither constructive nor feasible. It would only complicate Seoul's efforts to advance denuclearization on the Korean Peninsula. Lee also added that the reintroduction of US tactical nuclear weapons on the Peninsula would cause serious backlash with neighboring countries, and he also

[8] Elisabeth Bumiller and Edward Wong, "China Warily Eyes U.S.-Korea Drills," *New York Times*, July 20, 2010, https://www.nytimes.com/2010/07/21/world/asia/21military.html#:~:text=Elisabeth%20Bumiller,July%2020%2C%202010

[9] Ryu Da-in, "Won Yu-cheol, a Member of the National Assembly, Discusses 'How to Proceed with the Korea-US Nuclear-Sharing Agreement,'" *Jeongpil*, November 12, 2019, https://www.jeongpil.com/173024

suggested that the United States would be reluctant to honor that request.[10] For good reasons: a Biden administration official said that the United States would not support redeploying tactical nuclear weapons to South Korea, and that there was no consideration for the establishment of a nuclear sharing arrangement with Seoul.[11]

Still, according to a recent poll conducted by Asan Institute, a leading think tank in Seoul, nearly 70% of South Koreans support the development of independent South Korean nuclear weapons, while over 61% want the reintroduction of US tactical nuclear weapons. This finding is based on the three sub-findings. First, nearly 95% of South Koreans believe that North Korea possesses an operational nuclear arsenal, and over 93% believe that North Korea will not abandon it. Second, over 72% of the same people stated that the South Korean military cannot deter North Korea in the event of a contingency on the Korean Peninsula. Third, South Koreans have growing doubts about the US commitment on extended *nuclear* deterrence in particular. Asked whether they believe that the United States would intervene in the event of a military contingency on the Korean Peninsula, nearly 87% (86.6%) of the respondents answered yes. However, when asked whether they believed that the United States would use nuclear weapons in response to a North Korean nuclear attack on South Korea, only 51.1% answered in the affirmative. That explains why the South Korean public has had an increasingly favorable view about developing independent nuclear weapons.[12] Significantly, the idea of a nuclear-armed South Korea is no longer a fringe argument in conservative circles; it is now a primary feature of the conservative party platform.

This discussion about South Korea "going nuclear" is taking place almost exclusively with North Korea in mind. But it could soon include China as well. If the current trendlines are confirmed, it probably will. That said, before anything else, Seoul wants nuclear stability in the region. It does not want to see intensifying US-China strategic nuclear competition. As a result, Seoul worries that a tougher US nuclear stance vis-à-vis China may contribute to increasing military tensions and lead to a fast and more dangerous Chinese nuclear build up. There are growing concerns in Seoul that Washington is becoming too obsessed with strategic nuclear competition with China, and that South Korea and other regional countries will pay a heavy price for it.

In particular, South Korea will not welcome US calls (or pressure) upon Seoul to get involved. THAAD was a hard lesson for South Korea, one that South Koreans will not forget, and Seoul does not want to go through a similar experience again. After the incident, the Moon administration tried mend the strained relations with Beijing. Significantly, on October 30, 2017, South Korea's Foreign Minister Kang Kyung-wha stated in a National Assembly hearing what came to be known as South Korea's "three no's policy: Seoul had no intention to (1) install additional THAAD batteries, (2) participate in a regional missile defense system, and (3) form a trilateral alliance with the United States and Japan. The following day, Presidents Xi and Moon issued a joint statement emphasizing their rapprochement, which included high-level contacts and the renewal of the bilateral currency swap deal followed by a gradual easing of economic measures imposed on Seoul.[13] As a result, South Korea does not want further deployments of missile defenses on its territory, nor does it want to contemplate integration of South Korea into US-Japan missile defense cooperation. Seoul will also be cautious about the possible development and deployment of US intermediate-range missiles on or near the Korean Peninsula.

As for a US acknowledgment of mutual vulnerability, the only way Seoul could welcome it is if it contributed to stabilizing US-China strategic nuclear competition. If it helped lead to US-China nuclear confidence-building measures or, better, arms control, Seoul would see it as a positive development. The United States, however, also would have to strengthen its commitment to extended deterrence.

[10] Jung Won-sik, "Lee blast 'opposition party candidates' tactical nuclear weapons redeployment as dangerous populism," Kyunghyang Sinmun, August 28, 2021.

[11] "All I can say is, U.S. policy would not support that. And I would be surprised that the people who issued that policy don't know—or [who] issued those statements—don't know what US policy is," said Mark Lambert, US Deputy Assistant Secretary of State for Japan and Korea. William Gallo, "US Rules Out Redeploying Tactical Nukes to South Korea," Voice of America, September 24, 2021, https://www.voanews.com/a/us-rules-out-redeploying-tactical-nukes-to-south-korea/6243767.html

[12] James Kim, Kang Chungku, and Ham Geon Hee, "Fundamentals of South Korean Public Opinion on Foreign Policy and National Security," Asan Report, September 13, 2021 https://en.asaninst.org/contents/fundamentals-of-south-korean-public-opinion-on-foreign-policy-and-national-security/

[13] Jeongseok Lee, "Back to Normal? The End of the THAAD Dispute between China and South Korea," *China Brief*, vol. 17, no. 15, November 12, 2017, https://jamestown.org/program/back-normal-end-thaad-dispute-china-south-korea/

Even then, support for the development of an independent South Korean nuclear capability will likely rise, and requests for the redeployment of US tactical nuclear weapons and NATO-style nuclear sharing arrangements will continue. In this context, the impact such measures would have on nuclear negotiations with North Korea as well as inter-Korean relations will be a key consideration for Seoul.

Conclusions

South Korea and other Asian allies are increasingly concerned about the credibility of the US nuclear umbrella as the North Korean nuclear threat is becoming more severe and as US-China strategic competition is intensifying. For South Korea in particular, four years of "American-First" policy have undermined the alliance greatly and, by extension, the US commitment to the region and its defense. Seoul will find it difficult to rebuild trust with the United States, despite the Biden administration's efforts to repair the alliance and value its allies as well as multilateralism.

Even if the alliance is sustained and extended deterrence strengthened, the bigger question is whether South Korea can – and should – live under America's nuclear umbrella indefinitely. In a recent article, Jennifer Lind and Daryl Press argued that South Korea should build its own nuclear weapons.[14] According to both scholars, the South Korea-US alliance faces "credibility problems." In other words, South Korea cannot be certain that it can depend on its US ally for protection in the event of a war with North Korea because Pyongyang now has a nuclear capability sufficiently sophisticated to target US cities in retaliation. North Korea also has good reasons to doubt that Washington would rush to Seoul's aid in a war, for the same reason: because doing so would entail immense risks for the United States.

The same dynamics will apply with China, especially given that Beijing has an even more sophisticated arsenal than North Korea. Moreover, and more worryingly, Seoul and Washington are not on the same page with regard to China, which will further complicate the situation.

Given the growing power and ambition of China in the region and beyond, US-China strategic competition will probably be the defining feature of Asia's and the world's geopolitics. Yet, it is not in anyone's interest to see a repeat of the nuclear arms race that defined the strategic competition between the United States and the Soviet Union in the twentieth century. It will be better for everyone if the United States and China can find a way to stabilize their strategic deterrence relationship before, not after, they have gone through nuclear competition.

[14] Jennifer Lind and Daryl G. Press, "Should South Korea build its own nuclear bomb?" *Washington Post*, October 7, 2021, https://www.washingtonpost.com/outlook/should-south-korea-go-nuclear/2021/10/07/a40bb400-2628-11ec-8d53-67cfb452aa60_story.html

7

Actors, Orders, and Outcomes: Distilling an Australian Perspective on a US-China Acknowledgement of Mutual Vulnerability

Rod Lyon

How might Australians think about a US-China acknowledgement of mutual nuclear vulnerability? Answering this question rests on a degree of extrapolation because few Australians are aware of this specific issue. They are not gathering spontaneously in town halls, public houses, and sports stadiums to discuss the finer points of such an agreement. Such gatherings have been prohibited in recent months by the "lockdown" regulations put in place across much of the country in response to the COVID-19 pandemic. Even if those regulations were not there, the topic is too esoteric to command broad interest, notwithstanding the Australian public's increasing awareness of a rising China and a more competitive strategic environment.

A more specialized debate might unfold among a segment of society in more normal times, but that segment already has plenty on its plate. As a result, a mutual vulnerability acknowledgement (MVA) has not been a topic discussed around Australian dinner tables, nor on the usual social network blogs, such as the Australian Strategic Policy Institute's *The Strategist* or the Lowy Institute's *The Interpreter*.

So, this chapter turns upon a more theoretical approach. It attempts to construct, from first principles, a framework that would bound and shape any such discussion. It does so by outlining Australian thinking about the principal actors involved in the negotiation and conclusion of such an accord; the contribution that such an agreement could make to order-building in Asia; and the likely outcomes of an MVA for Australian and regional security. Much as a surveyor might use a theodolite to determine the optimal location for a building upon its site, those three "sightings" should help anticipate an Australian position on the issue, hopefully one not too far removed from empirical fact.

The Actors

Let us start with the actors that would be the principal players in any such accord. Australian nuclear theology assigns a central role to responsible, nuclear-armed great powers in ensuring that nuclear weapons make a positive contribution to international security. As Prime Minister Robert Menzies argued back in 1957:

> there is an advantage to the world in having nuclear weapons in the hands of…great powers…sufficiently informed about the deadly character of those weapons to find themselves reluctant to cause a war in which they are used. The possession of these violent forces is a deterrent not only to prospective enemies but to themselves.[1]

Membership of that club—the club of the self-deterred—has varied over time. When Menzies made the case, he spoke of three responsible nuclear great powers: the United States, the United Kingdom, and the Soviet Union. With Australian signature and ratification of the Nuclear Non-Proliferation Treaty (NPT)—a treaty that Australian ministers have often identified as a central pillar of international nuclear arms control and nonproliferation—Canberra also recognized France and China as rightful holders of club membership.

By that logic, an MVA between the United States and China starts from a promising position. The two principal actors are both recognized great powers, both members of the "permanent five" (P5) on the United Nations Security Council, and both recognized "Nuclear Weapon States" under the NPT. On that basis alone, Australian policy-makers would be disposed favorably towards such an accord, believing that if two responsible nuclear great powers saw it as a stabilizing element in their bilateral relations, it would be churlish for others to disagree.

In truth, however, the Australian understanding of what makes a great power "responsible" has wavered over the years. As the exclusivity of the nuclear club has started to break down, and the weapons themselves have proliferated to states other than the P5, Australian policymakers have been drawn to question their reflexive belief in responsible nuclear great powers. "Responsible is as responsible does" seems to have emerged as the principal criterion, i.e., whether states are judged as responsible is determined by a behavioral test, not simple P5 membership.

China would not be the first of the P5 to run afoul of that metric. France, some decades back, felt the cool winds of Australian disapproval of its South Pacific nuclear testing program. That disapproval rested

[1] Robert Menzies, Ministerial Statement on Defence, Australian Parliamentary Debates, House of Representatives, Canberra, September 19, 1957, p.798.

upon a comparatively poor understanding of the role of the French nuclear deterrent in providing a second decision center inside the North Atlantic Treaty Organization (NATO). But by the mid-1980s, the Australian government was one of the leaders in drawing up a South Pacific Nuclear-Weapon-Free Zone, intended—in part—to delegitimize French testing on Mururoa and Fangataufa. Relations soured to the point where the two countries could barely speak to each other. French bombing of the Rainbow Warrior in Auckland harbor was a point of particular difficulty.

Still, the behavioral test has proved to be a door that could swing both ways. It has opened the possibility that responsible nuclear great powers might be found outside the confines of the P5, and outside the confines of the NPT. That was the case for India. Australia's initial belief that India and Pakistan should be tarred with the same brush after the string of nuclear tests on the subcontinent in 1998 gave way, within a few years, to an acceptance that the two countries were not alike. Since then, Australia has agreed to sell uranium to India—an important shift in a policy, which, previously, had required purchasers to be members in good standing with the NPT.

In short, although responsible nuclear great powers continue to hold a special place in Australian thinking, in relation to an MVA a question would arise over whether the necessary adjective could be applied to both parties. Since one of the great powers is Australia's ally and the other its principal strategic worry, the question would be raised more in relation to China than the United States.

So, is China a responsible great power? Today, the question contains distant echoes of Robert Zoellick's argument from 2005 that China should become a "responsible stakeholder" in the global order.[2] There are points of overlap between Zoellick's understanding of "responsible" behavior and Australian policymakers', but for Australia the answer to this question would turn more heavily upon the standard of whether China displayed the appropriate quality of self-deterrence. That standard seems to require Menzies' "self-awareness" of the enormous destructive potential of nuclear weapons, and a "reluctance" to embark on hazardous enterprises in which such weapons might be used. It is a standard that might be applied to both nuclear and non-nuclear behaviors.

Had that question been asked a decade or so earlier, the answer would have been straightforward. Since its first nuclear test in 1964, Beijing had demonstrated considerable restraint in relation to its nuclear arsenal. The arsenal had been described as lean and mean—matched to a declaratory policy stressing minimal nuclear deterrence and no-first use. Yes, there was evidence of a less cautious China—the China which helped Pakistan towards nuclear weapons, for example, or the one which conducted a test of a ballistic missile with a live nuclear warhead over the heads of millions of its own citizens. But there was much to show a cautious China. It was the P5 member that had conducted the fewest nuclear tests, and deployed the smallest nuclear arsenal.

That conclusion could not be reached so readily in 2021. Events of recent years portray a darker, and perhaps a more risk-tolerant China. This is a great power seemingly increasing its missile-silo numbers by an order of magnitude, and which has collocated its nuclear and conventional assets deliberately to complicate US targeting. On both counts, China seems less committed to arms-race stability and crisis stability than one might like.

A difficulty arises, however, if we try to discern intent in the mere growth of capabilities. Modernization of the People's Liberation Army (PLA) will offer China's leaders a broader suite of military options further down the track but, by itself, that will be an insufficient basis upon which to find China an "irresponsible" great power. Even today, the recent abrupt growth in missile silo numbers might enhance existing command-and-control arrangements. Further, the silo fields might be regarded as a Chinese "sponge," not unlike the one that US intercontinental ballistic missiles provide for the American arsenal. It forces an adversary attempting a first strike to show its hand by requiring a substantial crossing of the nuclear threshold, and not a trivial one.

So, we need to cast the net wider to argue the issue of "responsibility." Here, there is much to point to a more assertive China. In recent years, Chinese behavior towards both its neighbors in general and Australia in particular has varied between the belligerent and the coercive. Influence peddling,

[2] Robert Zoellick, "Whither China: From membership to responsibility?" Remarks by Deputy Secretary of State Robert Zoellick for the National Committee on US-China Relations, New York City, September 21, 2005.

cyber-attacks, gray-zone militancy, "wolf-warrior diplomacy," and economic pressure have become the daily fare of Chinese policy. Both the Belt-and-Road Initiative and the dramatic expansion of the conventional and nuclear arms of the PLA advertise a more outward-looking China, even as Beijing speaks of its entitlement to a Sinocentric regional order. In Australia, China's seen as promoting that different vision of the region—irresponsible in the Zoellick sense, rather than the Menzian one.

Is that enough to label China an irresponsible great power? The answer is not clear.

What about the United States? Is the United States a responsible nuclear great power these days? Hasn't the Chairman of the US Joint Chiefs of Staff spoken of having phoned China's chief of army during the dying days of the Trump administration to reassure him that the US nuclear arsenal was not under the control of a wayward president?

To be sure, most Australians would be hard-pressed to think of their major ally as being an irresponsible nuclear actor. Several decades of close cooperation make that difficult, if not impossible.

While the inauguration of the Biden administration has likely removed any uncertainties over the command-and-control of the US nuclear arsenal, the position of the United States on a possible MVA underlines one further problem. The US policy-shaping elite is divided over whether an MVA with China would be a good idea. That division is not new; it has existed for several years.

Looking at both great powers, then, there seems to be one great power which wants an MVA, but whose sense of responsibility is, from an Australian perspective, questionable, and a second great power which Canberra deems responsible, but which is uncertain about whether an MVA would be a boon or a curse.

Apart from the two great powers, there is another group of actors that would bear on an Australian decision: The international community in general, but in particular other US allies. Australia likes being in good company. If an MVA can attract broad support across US alliance partners, Canberra is more likely to support such an accord, whatever its internal misgivings. Australian policymakers would be anxious about being out of step with major NATO capitals, Tokyo, or Seoul, over the relative balance of costs and benefits of an MVA.

What does this analysis suggest? The actor-based assessment does not yield a clear answer to the question of whether an MVA would be acceptable to Australia. The traditional picture of China as a responsible nuclear great power has been blurred both by word and deed. That blurring cannot be erased easily. Australian policymakers would be motivated to look beyond the "actor" dimension to determine their approach to an MVA.

The Metric of "Order"

Australia clings to an order narrative to underpin its middle-power status in the world. It speaks regularly about its support for a liberal, rules-based order as its preferred basis for resolving international tensions; in the 2016 Defence White Paper, the phrase appears with monotonous regularity. Shifting power balances, where there are no rules, appear much less often.

Further, Australia identifies itself as the Western nation that lives in Asia. Unlike the countries of Western Europe, it is not bordered on all sides by allies with shared histories, cultural affinities, and a common economic union.

So, when Australia looks at nuclear issues, it sees itself as the simultaneous beneficiary of two separate and distinct nuclear orders. The first order, and the one Australians knows best, is the global nuclear order: William Walker's two interlinked managed systems of deterrence and abstinence. Australians are familiar with this order even though they might not

"The traditional picture of China as a responsible nuclear great power has been blurred both by word and deed. That blurring cannot be erased easily. Australian policymakers would be motivated to look beyond the 'actor' dimension to determine their approach to an MVA."

be familiar with Walker's academic description of its dimensions.[3] The second order is the Asian nuclear order: a pre-managed, pre-systemic set of arrangements that turn heavily upon the principle of voluntary self-restraint.[4]

The two orders are strikingly different. The global order turns on structured deterrence and formal arms-control negotiations, spurred along by occasional bursts of unilateralism; the Asian order emphasizes unilateral self-restraint. The global order emphasizes symmetry and transparency; the Asian order has a high tolerance for asymmetries and opacity. The global order included, for many years, an open arms race between the United States and the Soviet Union, which saw numbers of nuclear warheads spiral upwards into the tens of thousands. By contrast, the Asian nuclear order is characterized by arsenals that number only a few hundred warheads or fewer. The global order places nuclear weapons in the foreground of strategic policy settings; the Asian order places them in the background.

Australian attachment to the global order is self-evident. Australia's position, as a miner and exporter of uranium, means the country has a direct transactional interest, and not just a strategic one, in a low-proliferation world. Pushing for such a world is the motivation behind Australian advocacy of a comprehensive nuclear-test ban, interest in potential diversion of nuclear materials between civil and military programs, and support for international monitoring systems. Australia is also a supporter of the deterrence pillar of global order, not just the managed system of abstinence, hence its strong attachment to its alliance with the United States, and the joint facilities which underpin the bilateral strategic relationship.

Australian strategic commentators have referred to those facilities as "the jewel in the crown" of the alliance relationship.[5] Over decades, they have supported communications links with US nuclear submarines, provided early detection of ballistic-missile launches, and enabled verification of key arms-control agreements. Those facilities also do more than support US extended deterrence across the region: They support the central deterrence mission of protecting the US homeland.

By contrast, Australia's attachment to the Asian nuclear order is less obvious. It is defined by the absence of certain behavior rather than its presence. To see the link, consider how much of past Australian nuclear policy has been shaped by Asian self-restraint in general, and Indonesian self-restraint in particular. One of the principal constraints upon Australian nuclear-weapon development over the years has been the concern that an Australian crossing of the nuclear threshold would likely lead Indonesia to follow suit. Indonesian nuclear-weapon development would have excited Canberra to follow suit as well.

"In short, Australia has—to an extent—linked its own thinking about nuclear weapons to that of its Asian neighbors. Cultural identity has tied Australians to the global nuclear order, but geography has tied them to the Asian one."

Just as Australia has seen itself and Indonesia as a pigeon pair, it has taken comfort from the broader withholds that characterize the Asian order. If we posit the counterfactual—namely that the Asian order bore the hallmarks of the broader global order—Australian nuclear restraint would be more difficult to explain. Moreover, there is distinct, if limited, evidence that Australian policymakers understood that nuclear weapons played a different role in Asia than they did on the global stage. While Menzies was advocating a world of responsible nuclear great powers, he was arguing that a future conflict in Southeast Asia was less likely to spiral towards nuclear escalation than was a similar conflict in Europe.

In short, Australia has—to an extent—linked its own thinking about nuclear weapons to that of its Asian neighbors. Cultural identity has tied Australians to the global nuclear order, but geography has tied them to the Asian one.

[3] Readers unfamiliar with Walker's thinking may wish to browse his book, *A Perpetual Menace: Nuclear Weapons and International Order* (London: Routledge, 2012).

[4] Rod Lyon, *A Shifting Asian Nuclear Order* (Canberra: ASPI Special Report, September 2016).

[5] Peter Jennings, "The joint facilities: Still the jewel in the crown," *The Strategist*, February 21, 2019.

A problem has emerged in recent years, however: The growing entanglement between the global and Asian nuclear orders. As power and wealth have shifted to Asia, the regional nuclear order has been challenged increasingly by power shifts and technological developments. Such developments have made more pressing the need to find some "bridge" between the two orders. That is the requirement an MVA could address. An MVA might offer a form of reassurance, from the global order to the regional one, that the distinct differences between the orders do not need to be a barrier to closer nuclear cooperation.

Put bluntly, the disadvantages of an MVA to the United States might be worth accepting if the result was a China still in compliance with the Asian principle of voluntary self-restraint. Unfortunately, the pace of recent developments in the Chinese nuclear arsenal suggests that Beijing may have concluded that the Asian nuclear order belongs to an earlier era—one in which Asia was "a subordinate security region" rather than "a core world region."[6] Attempting to build such a bridge now would be equivalent to attempting to bridge a river one of whose banks was already crumbling.

That leads to a different question: Can an MVA have value as a stabilizing factor between two countries in the same nuclear order? That is, could an MVA be a way of recognizing China's shift from the Asian order to the global one? To ask that question is to ask whether the US-China nuclear bilateral relationship can be stabilized in the same way that the US-Soviet nuclear bilateral relationship was stabilized—by an MVA which recognized the strategic potency of a technological fact. The fact was that in the event of nuclear conflict neither could escape the retaliatory capabilities of the other. Both countries possessed secure second-strike arsenals, and in that possession lay the basis for an uneasy stability.

Caution is in order. China's latest nuclear surge might provide the basis for an MVA which mirrored some of the earlier US-Soviet acceptance of mutual assured destruction. Let us not rush to judgment, however. At a minimum, China's understanding of what might be required for it to retain a secure second-strike capability has changed profoundly in recent years. Its apparent abandonment of the strictures of the old Asian nuclear order does not necessarily mean that it has accepted those of the global nuclear order. Beijing's commitment to the levels of transparency required to underpin nuclear arms control at the global level remains in doubt. Even its commitment to something like numerical parity at a time when China is strong is untested.

Plainly, today there is a China which has moved away from the Asian nuclear order, but not towards the global one, at least not yet. The picture is more of a "disordered" China rather than a "globally-ordered" China. The metric of "order," then, will struggle to provide a clear answer as to how Australia ought to think about an MVA.

Contemplating Outcomes

The third "sighting" through which Australian policymakers would think about a potential MVA between the United States and China involves the possible outcomes of such an accord. Australians are nothing if not consequentialists, so those considerations would influence the conclusions around the cabinet table, especially if the notions of responsibility and order failed to provide leverage.

A series of critical questions would sit at the heart of the debate. What are the implications of an MVA for the future strategic balance in Asia? What are the implications for the future US role in the region, or about the US-China bilateral relationship? Will this lead to the rise of a "Group of Two" (G2) in Asia, which might sideline the hub-and-spokes security architecture of yesteryear? In particular, what might an MVA mean for the resilience and effectiveness of US extended nuclear deterrence in Asia?

Those are difficult questions to answer during the best of strategic times. These are not the best of times. Complicating the answers is a transformational "swirl" that currently characterizes both the regional security environment and Australian strategic thinking.

Perhaps the best path into that swirl is the speech given by Prime Minister Scott Morrison at the launch of the Defence and Strategic Update (DSU) 2020.[7] It is a speech written by more than one hand, disjointed in its attempts both to portray a major pivot in Australian strategic policy and to defend, simultaneously, the government's 2016 Defence

[6] Muthiah Alagappa, *The Long Shadow: Nuclear Weapons and Security in 21st Century Asia* (Stanford, CA: Stanford University Press, 2008), p. 37.

[7] Scott Morrison, "Address—Launch of the 2020 Defence Strategic Update," July 1, 2020.

White Paper. Still, Morrison's assertion of a "pivot," in terms not too dissimilar from Dean Acheson's memoir *Present at the creation* (1969), his depiction of a poorer, more dangerous, and more disorderly world, his claim for a multipolar order in Asia giving agency not just to the United States and China, but to Japan, India, Australia, Indonesia and others, plus his recognition that the current Australian Defence Force is woefully lacking in offensive strike capabilities, suggest an important shift in Australian thinking.

One of the more compelling arguments in favor of an MVA is that it could bring an element of stability to an otherwise ominously untethered US-China bilateral relationship. Professor Hugh White from the Australian National University has argued that an MVA could play such a role—that acknowledgement of a shared vulnerability was "essential" to the maintenance of strategic stability during the Cold War, that mutual vulnerability does not mean equal vulnerability, and that failure to admit some degree of shared vulnerability could prove fatal to US credibility with its regional allies.[8]

Yet does the US-China bilateral relationship play a role analogous to that of the US-Soviet bilateral relationship during earlier decades? Or is there a risk that preferencing that relationship in a more multipolar Asia risks undercutting Washington's strategic relationships with other major players?

With much at stake, DSU 2020, drafted during the Trump years, is an argument for greater Australian strategic self-reliance, not an argument for termination of the US-Australia alliance. Australia remains a determined advocate of US engagement in Asia.

The United States brings two key assets to the region: critical military capabilities and its support for a liberal regional order. Among the critical military capabilities are weapons capable of offensive strike, and Victor Cha's book, *Powerplay* (2016), is the story of how—and why—those weapons ended in American hands. Still, the resulting division of missions and distribution of capabilities between the United States and its regional allies means that US engagement underpins not merely Australia's security, but also the security of other US allies in the region.

Would an MVA alter the US role in the region? It is difficult to imagine that it would be a decisive factor in shaping overall engagement, but it is important to remember that the US role is already being reshaped by a shift from the power-play philosophy to the empowerment of its allies.[9] China will almost certainly portray any major new initiatives as an attempt to upset mutual vulnerability in a blind pursuit for first-strike advantage. Those initiatives might include enhanced missile defenses and possible rearrangements of alliance roles in regard to offensive strike capabilities.

Maintaining the credibility of extended nuclear deterrence is an important part of US engagement in Europe, Northeast Asia, and the Middle East, and if extended deterrence fails anywhere, it could fail everywhere. Sustaining the credibility of extended deterrence has been getting harder for a while now; it was a doctrine built for a simpler, bipolar world.

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An MVA, however, would bring a rash of questions bearing on the future of extended deterrence. One of those questions must be: Is nuclear superiority useful? It is a question oddly reminiscent of the academic debate between Robert Jervis and Samuel Huntington back in the 1990s: Does primacy matter?[10] Huntington argued that to ask that question was to ask if power mattered. If it did not matter, we should be indifferent as to whether the United States, Russia, or China exercises primacy. Similarly, if nuclear superiority does not matter, then it is unimportant which great power exercises it. But US allies in Asia think it does matter who exercises it—

[8] Hugh White, "To reassure US allies in Asia, admit mutual vulnerability with China," *War on the Rocks*, June 8, 2018.

[9] Charles Edel, "What drove the United States to AUKUS?" *The Strategist*, November 3, 2021.

[10] Robert Jervis, "International Primacy: Is the Game Worth the Candle?" *International Security*, vol. 17, no. 4, Spring 1993, pp. 52-67 and Samuel Huntington, "Why International Primacy Matters," *International Security*, vol. 17, no. 4, Spring 1993, pp. 68-83.

that with China taking such rapid strides in the modernization of its conventional military forces, a measure of US nuclear superiority is critical to underpin extended deterrence.

Perhaps unsurprisingly, Australia believes that US extended deterrence is an essential contributor to regional and global stability. It believes its major ally has designed an arsenal which supports the principal strategic missions it has set itself, and extending nuclear assurance to multiple allies and partners worldwide is one of those missions. So, Canberra would worry that the costs of an MVA could not be distributed equally when the nuclear arsenal of one of the great powers backstops the security of many countries worldwide, while the arsenal of the other great power backstops only its own security. Given the ordering role played by US extended deterrence, the United States should beware making a fetish of its own vulnerability.

Alongside those considerations, the sudden announcement—in September 2021—of a new trilateral technology agreement between Australia, the United Kingdom, and the United States (AUKUS), brings new grist to the mill. AUKUS promises to be a long-winded agreement, since the first project for cooperation, whereby the United Kingdom and the United States will assist Australia to build a fleet of nuclear-propelled submarines, will last decades.

Moreover, AUKUS seemingly provides a way of assuring Australia about US engagement in relation to an issue that has often hovered—like Banquo's ghost—above some of the more nitty-gritty details of strategic cooperation. Cooperation on naval nuclear propulsion, a technology which would expand greatly the range of Australia's submarines and allow the country to play a more significant role in the broader Asian force balances, offers an unusual form of "nuclear sharing" uniquely tailored to Australia's strategic needs. In doing so, it addresses one of the specific challenges that US extended assurance has encountered in relation to its regional allies.

US alliances in the Asian theater are not known for detailed nuclear sharing, unlike the NATO alliance in Europe, where such sharing manifests in distinct forms of cooperation. But in Australia's case, at least, direct importation of a NATO nuclear-sharing model would not be especially attractive. The major drawback would be geographical: US nuclear sharing arrangements with its European allies, under which the allies provide tactical-range delivery aircraft to partner with US nuclear warheads, are a form of what might be called "nuclear sharing on a short leash." That leash is too short to be of great value to Australia. Even based in Northern Australia, an F-35 aircraft carrying a nuclear payload would find it difficult to get any further than Indonesia. In brief, the vast distances of the Asian theater require "nuclear cooperation on a long leash" if the cooperation is going to have much deterrent value.

Australian strategic commentators have mooted occasionally what such cooperation might look like, including, for example, the unlikely sale of B-21 bomber aircraft to Australia.[11] For the distances involved between Australia and any likely great power adversary are such that even intermediate-range capabilities (of the sort previously restricted by the Intermediate-Range Nuclear Forces Treaty, but now permitted by its termination) would be of only marginal use.

AUKUS provides a different form of long-range nuclear sharing. It offers a special form of US commitment to Australia—one involving the transfer of a particular set of rare technological skills to Washington's smaller ally. Much will turn upon the shape of that cooperation, and the details are yet to be worked out. Those details matter. They go to the heart of how Australia thinks about its own future. There is a vast gulf between, for example, an Australia which chooses to buy or lease its submarines, an Australia which chooses to build only the front half of the submarines—essentially an exercise in bending metal and welding—and an Australia which chooses to master the back half of the submarines, including the propulsion and drive train.

AUKUS merits mention because it is the sort of activity that portends a different regional strategic balance—beyond the US-China bilateral relationship. It is not a pact to enable Australian nuclear-weapon development, despite China's accusations to the contrary. Nor is it a pact that an MVA would have prohibited—a useful reminder that an MVA would not, by itself, determine Asia's strategic future.

[11] Marcus Hellyer, "B-21 bomber could be Australia's best long-range strike option," *The Strategist*, May 24, 2021.

Conclusions

What does this brief tour of actors, orders, and outcomes suggest about potential Australian thinking about a possible MVA between the United States and China?

The first and most obvious conclusion is that an MVA would be a contested proposal. An MVA nested in the notion of China as a responsible nuclear great power, which engaged a China that accepted the restraints of either the Asian nuclear order or the global one, and which promised enhanced strategic stability in the region, would be a proposal an Australian government could support. But it is far from clear whether an MVA can be so nested. At the opposite end of the spectrum, an MVA which rewarded Beijing for a likely rapid quadrupling of warhead numbers, which engaged a China which had abandoned the Asian nuclear order but had failed to engage with the global one, and which was seen by key US allies as undercutting extended deterrence, would be problematic for Canberra.

An MVA which takes those problems seriously has a better chance of finding acceptance with Australia. That would mean fitting an MVA into a broader suite of actions. Some of those actions—for example, a P5 declaration that a nuclear war cannot be won and must never be fought—might strengthen the perception of China as a responsible great power, and thus provide a stronger foundation for an MVA. Similarly, explicit Chinese commitment to some of the mechanisms of the global nuclear order—detailed verification arrangements for at least one leg of its growing strategic triad, for example—would reinforce a picture of an ordered rather than a disordered player. Finally, US actions to enhance its extended deterrence arrangements would assure jittery allies, and ease concerns over a possible G2 condominium in Asia.

8

Why the United States Should Discuss Mutual Nuclear Vulnerability with China

Tong Zhao

Against the background of a more competitive US-China nuclear relationship, the need to defuse the emerging nuclear race is growing. This chapter begins by analyzing one potential driver of China's nuclear expansion—genuine anxiety over US strategic intent—and explains why the US acknowledgement of the *de facto* existence of a mutual nuclear vulnerability relationship with China could help reduce Beijing's perceived need to invest in nuclear forces.

The chapter then examines additional driving forces behind China's recent acceleration of nuclear buildup and illustrates why US acknowledgement of mutual vulnerability may not address fully China's threat perception, therefore making it unlikely that such a measure would stabilize the bilateral nuclear relationship by itself. Unclear Chinese expectations of what mutual vulnerability means and how to sustain it at the practical level present challenges for the United States to accept mutual vulnerability formally. Finally, the chapter argues for a dialogue between Washington and Beijing on mutual vulnerability to manage the bilateral nuclear relationship.

Why Washington Should Seek to Reassure Beijing on Nuclear Policy

The Chinese attitude toward mutual vulnerability and its motivation behind its comprehensive nuclear modernization, including the acceleration of this effort in recent years, should inform US debates about whether the United States should acknowledge or accept mutual vulnerability with China. If China's nuclear buildup is driven by a shift toward a more offensive nuclear strategy that goes beyond the maintenance of second-strike capabilities and involves nuclear first-use planning, the United States would have a strong incentive to develop countermeasures.[1] The perceived Chinese interest in developing nuclear first-use options could make Washington consider preemptive strike options against Chinese nuclear forces more seriously.

However, Chinese government statements and expert opinions suggest that China itself still sees its nuclear modernization as a self-defensive measure aiming at countering perceived growing external threats.[2] That Beijing perceives itself as trying to maintain mutual vulnerability, as opposed to pursuing a more offensive nuclear posture, argues for the United States not to dismiss immediately the importance of reassuring China. A US move to reject mutual vulnerability explicitly as a matter of policy or pursue preemptive nuclear strike options could reinforce China's threat perception and probably motivate Beijing to redouble its nuclear investment, accelerating the downward spiral of nuclear competition. To make no change to the existing US policy and maintain the ambiguity over US attitude toward mutual vulnerability with China would be less controversial, but as argued below, a more explicit acknowledgement of the *de facto* existence of mutual nuclear vulnerability between the two countries would reduce some of the competitive pressure, which would serve their interests.

China's defensive self-perception does not mean that other countries agree with its self-image or that Beijing's efforts to maintain mutual nuclear vulnerability will not have negative implications for US-China relations or regional stability. The following sections addresses these issues in more depth. The analysis indicates that reassurance messaging from Washington to Beijing could help address some of China's genuine threat perception, and thus may help stabilize the emergent nuclear competition.

Different Levels of Mutual Vulnerability

China's growing nuclear capabilities have raised the concern that Beijing may seek to use nuclear weapons first in a future conflict. However, many capabilities China is reportedly developing and new operational policies it may be adopting—such as putting some nuclear units on combat readiness duty in peacetime and potentially embracing a launch-on-warning posture—are not necessarily inconsistent with the objective of strengthening mutual nuclear vulnerability relationship with the United States. To Chinese experts, a mutual vulnerability relationship ensures that the United States would not threaten nuclear attack against China even under the direst conditions.

[1] Sevastopulo, Demetri. "China's Nuclear Build-Up: 'One of the Largest Shifts in Geostrategic Power Ever,'" *Financial Times*, November 15, 2021.
[2] Comments by Ambassador Fu Cong, Director General of the Arms Control Department of the Chinese Foreign Ministry, at the 2021 EU Nonproliferation and Disarmament Conference, December 6, 2021. See also, Timothy Wright, Twitter, December 8, 2021, https://twitter.com/Wright_T_J/status/1468544694950977544. On Chinese expert opinions, see, for example, Hu, Gaochen (胡高辰), "Analysis of US-China Asymmetric Nuclear Stability and US Strategic Opportunism (中美不对称核稳定与美国战略机会主义论析)," *International Security Studies (国际安全研究)*, no. 2, 2021, pp. 63-87, 160-61.

In practice, mutual vulnerability—or the capability to deter US nuclear use—is not a one-off achievement with only one capability threshold. Rather, it is a condition that has deepened by degrees as China's nuclear capabilities grew.

For decades after China's first nuclear test in 1964, Beijing reportedly pursued a credible second-strike capability based on massive retaliation. Over the past decades, growing Chinese concerns about US development of missile defenses, conventional precision-strike weapons, and other new military technologies continued to fuel China's efforts to modernize its nuclear forces gradually. As China's overall relationship with the United States went through ups and downs and experienced several serious crises, such as the 1995 Taiwan crisis, the 1999 bombing of the Chinese embassy in Belgrade during the Kosovo War, and the 2001 EP-3 incident,[3] Chinese nuclear modernization has sought to minimize the risk that Washington might think Beijing's second-strike capability is vulnerable.

However, an absolutely secure second-strike capability only contributes to a mutual vulnerability relationship at a basic level. This capability may be sufficient to deter a massive US nuclear attack, but it might give China few options to respond to a limited nuclear use by the United States. Therefore, Chinese military strategists have shown an interest in developing escalation management capabilities as early as the 1980s.[4] The ability to respond at various rungs of the nuclear escalation ladder could help China de-escalate a nuclear conflict on terms more acceptable to Beijing, some Chinese strategists believe. In this sense, acquiring such capabilities could deter the United States from launching a limited nuclear attack in the first place and from escalating a nuclear conflict to higher levels if nuclear conflict breaks out. The pursuit of an escalation management capability—if that is the Chinese intent—would still be consistent with a defensive objective of deterring nuclear use or nuclear escalation by the United States. For China, having an ability to deter US limited nuclear first use and nuclear escalation would thus achieve mutual vulnerability at a deeper level.

The severe deterioration of US-China relations and the rise of strategic competition, as well as the mounting tensions over the Taiwan Strait and South China Sea, have exacerbated Chinese concerns about the potential for US limited nuclear first use. Chinese military strategists also seem to consider scenarios of further nuclear escalation by the United States more seriously after the nuclear threshold is crossed. In other words, genuine perceptions of the US threat and associated concerns about deterrence gaps could be a driver of China's nuclear buildup.

If China feels compelled to augment its nuclear forces to achieve an effective escalation management capability, it will make the bilateral nuclear competition much harder to contain compared to when Beijing was mostly seeking a basic secure second-strike capability. For this reason, US efforts to reassure China that Washington does not seek to use nuclear weapons first (including limited nuclear first use) could mitigate Chinese threat perceptions. Both countries would be better served by working to diminish the risk of the nuclear threshold being crossed, rather than seeking to compete over nuclear escalation management capabilities.

"If China feels compelled to augment its nuclear forces to achieve an effective escalation management capability, it will make the bilateral nuclear competition much harder to contain compared to when Beijing was mostly seeking a basic secure second-strike capability."

In this sense, US acknowledgement of a *de facto* mutual vulnerability relationship could help reduce the Chinese anxiety that the United States could threaten nuclear escalation in conventional conflicts in the future. Among mainstream US experts, there is little doubt that China has acquired a secure second-strike capability against the US homeland,[5] so US

[3] See, for example, Wu Xinbo, "Managing Crisis and Sustaining Peace between China and the United States" *United States Institute of Peace Peaceworks*, Washington DC, 2008.

[4] Alastair Iain Johnston, "China's New 'Old Thinking': The Concept of Limited Deterrence," *International Security*, vol. 20, no. 3, 1995, pp. 5-42.

[5] Linton Brooks and Mira Rapp-Hooper, "Extended Deterrence, Assurance, and Reassurance in the Pacific During the Second Nuclear Age," *Strategic Asia 2013–14: Asia in the Second Nuclear Age* (Washington, DC: National Bureau of Asian Research, 2013), pp. 292-93.

acknowledgement of a *de facto* mutual vulnerability relationship would constitute a factual statement and would not introduce new risks to US security interests. Moreover, so long as China does not shift toward a nuclear first-use strategy, US acknowledgment of mutual vulnerability could reduce the overall Chinese concern that a future conflict with the United States could turn nuclear. This could, in turn, reduce the Chinese sense of urgency to develop escalation management capabilities and reduce some of the competitive pressure between the two countries.

Limits of Acknowledging Mutual Vulnerability as Reassurance

Although US acknowledgement of mutual vulnerability could help quell Chinese anxiety about US threats of nuclear escalation, other factors unrelated to nuclear issues are playing an increasingly important role in driving China's threat perception toward the United States, which could not be addressed by readjustment in US nuclear policy alone. In other words, absent efforts to address underlying causes of US-China rivalry, US acknowledgement of mutual vulnerability may have only limited impact on Chinese nuclear strategy.

Political Drivers of China's Threat Perception

In recent years, Chinese nuclear policy experts have developed a much more negative interpretation of US strategic intentions. For example, they often argue that Washington has become so desperate to prevent Beijing from challenging US dominance in the international system that the United States is willing to take greater risks to undermine China.[6] This increasingly pessimistic interpretation of the US strategic intention is much more a result of the perceived US hostility to China over issues like Xinjiang, Hong Kong, and human rights, than due to any specific US nuclear policies. Therefore, even if the Biden administration takes a more moderate and self-restrained approach on nuclear issues compared with the Trump administration, Chinese threat perceptions regarding US strategic intentions, including what the United States seeks to achieve through its nuclear policy, is likely to remain negative.

To Beijing, Washington is the aggressive party that is picking trouble with a peaceful and self-defensive China through fabricated accusations on issues like human rights. From China's perspective, the power dynamic in the international system is not a static situation in which the United States maintains a considerable lead over China, but a trend that sees China on the path of catching up with, and potentially surpassing, the United States in the long run. Thus, China interprets US intentions as trying to reverse this trend by destabilizing China and threatening its regime security. President Xi asserts that "the biggest source of chaos in the present-day world is the United States,"[7] while the *People's Daily*'s editorial claims the United States "has become the biggest troublemaker for global peace and stability."[8] Among Chinese experts, public opinion leaders, and the general public, the argument is often that China needs to build up its strategic military power to counter the perceived US destabilizing activities.[9] This mainstream thinking reduces China's interest in arms control cooperation with the United States.

This view that a stronger nuclear force would force the United States to exercise greater restraint when dealing with China steers Beijing away from the traditional rationale that focused almost exclusively on securing a second-strike capability during the time when US-China relations were more favorable.

Power-Centric Thinking

Because of China's perception that US criticisms against China's domestic and foreign policies are disingenuous and a cover for its real intention to undermine China,[10] Beijing has become disillusioned about the utility of communications and dialogues to persuade Washington to understand and appreciate

[6] Presentations by Chinese nuclear experts, Annual Meeting of the Academic Community of Political Science and International Relations, Tsinghua University, Beijing, July 5, 2021.

[7] Chris Buckley, "'The East Is Rising': Xi Maps out China's Post-Covid Ascent," *New York Times*, March 3, 2021.

[8] Sheng (钟声) Zhong, "Protection of Human Rights Does Not Tolerate Double Standards (保护人权容不得双重标准)," March 25, 2021.

[9] For example, see Hu Xijin, "China Needs to Increase Its Nuclear Warheads to 1,000," *Global Times*, May 8, 2020.

[10] Dalei Jie (节大磊), "Ideology and Us-China Strategic Competition (意识形态与中美战略竞争)," *Quarterly Journal of International Politics* (国际政治科学), vol. 5, no. 2, 2020, pp. 84-108.

the Chinese perspective.[11] Instead, Chinese experts generally argue that China has to focus on building up its own power.[12] Once China becomes powerful enough, the United States would have to recognize China's strength and success and give China the respect it deserves.[13]

This thinking affects China's domestic debate about its nuclear weapons policy as well. Nationalist public opinion leaders like Hu Xijin argue that China must invest in a much larger nuclear arsenal to make the United States respect China, just as they believe Russia's large nuclear arsenal has made the United States treat Russia with more reverence and mindfulness.[14]

Many Chinese experts have also concluded that the United States is an inherently hostile force and poses the greatest challenge to China's rise, and they believe that peace can only be achieved through strength.[15] This contributes to the power-centric thinking—the belief that one's relative power in the international system is the most crucial factor determining the fate of the country. As Chinese experts increasingly argue that a stronger Chinese nuclear force is a solution to perceived US strategic opportunism and adventurism,[16] the power-centric thinking appears to have a growing influence in the Chinese nuclear establishment.

In sum, political-level factors increasingly drive China's strategic threat perception, and many Chinese experts now demonstrate a strong power-centric worldview. The impact of these developments on China's nuclear policy appears to be significant, even though they have little to do with US nuclear policy. As a result, US acknowledgement of mutual nuclear vulnerability with China, although potentially useful in mitigating some of Beijing's anxiety, is unlikely, by itself, to change Chinese threat perception completely or its current thinking on the role of nuclear weapons in strengthening national security.

"As Chinese experts increasingly argue that a stronger Chinese nuclear force is a solution to perceived US strategic opportunism and adventurism, the power-centric thinking appears to have a growing influence in the Chinese nuclear establishment."

Chinese Expectations of Mutual Vulnerability

The mainstream view in the Chinese security policy community holds that mutual nuclear vulnerability with the United States is important to China. "Mutual vulnerability" may be too explicit a term to use in public conversations, which is why many Chinese experts talk about "strategic stability" instead. Strategic stability carries a similar meaning but sounds less menacing and is thus viewed as less politically problematic. Beyond this nomenclature, however, there are not clear or shared ideas in China about what mutual vulnerability would entail.

A major obstacle for the United States, then to acknowledge or accept mutual vulnerability with China is the lack of clarity regarding China's specific expectations for a mutual vulnerability relationship.

[11] Qi Chen (陈琪) and Xue Jing (薛静), "How to Understand the Current Diplomatic Opinion Struggle between China and the United States? (如何认识当前的中美外交舆论斗争？)," Beijing: Center for Strategic and Security Studies, Tsinghua University (清华大学战略与安全研究中心), May 25, 2020.

[12] Zhanchen Xu (徐占忱), "The Five-Stage Framework of the US-China Competition and China's Response Strategy (中美博弈五阶段框架与我国的应对策略)," *China Development Observation* (中国发展观察), no. 23, 2020, pp. 40-41.

[13] Weiwei (张维为) Zhang, "How to Dissect the West's Misconceptions About China? (如何剖析西方对中国的误解？)," China Institute, Fudan University, July 14, 2021.

[14] Hu Xijin (胡锡进), "What Hu Xijin Sees That Made Him Strongly Advocates China's Expansion of Nuclear Forces (胡锡进看到了什么，强烈主张中国扩大核力量)," *Global Times*, May 9, 2020.

[15] Yu, Hongjun (于洪君), "The Evolutionary Path of US Hegemony and the Future Course of US-China Relations (美国霸权的演进路径与中美关系的未来走势)," *Theory and Reform (理论与改革)*, no. 3, 2019, pp. 70-78; Zhouxian Zhao (赵周贤) and Guangming (刘光明) Liu, "Focusing on Peaceful Development to Build and Employ a Strong Military Force (着眼和平发展建设运用强大军事力量)," Chinese Military Sciences (中国军事科学).

[16] Xuanliang (李宣良) Li, Xuanjie (张选杰) Zhang, and Qinghua (李清华) Li, "Xi Jinping Awards Military Flag and Delivers a Speech to the Chinese People's Liberation Army Rocket Force and Strategic Support Force (习近平向中国人民解放军陆军火箭军战略支援部队授予军旗并致训词)," *People's Daily*, January 2, 2016; Hu, Gaochen (胡高辰), "Analysis of US-China Asymmetric Nuclear Stability and US Strategic Opportunism (中美不对称核稳定与美国战略机会主义论析)," *International Security Studies* (国际安全研究), no. 2, 2021, pp. 63-87, 160-61.

It would be hard for the United States (and China) to make commitments without understanding expected responsibilities. Any unresolved misunderstandings about expected responsibilities could cause significant disputes later about compliance with commitments and could end up further undermining stability.

This section discusses potential Chinese expectations about mutual vulnerability at and beyond the nuclear level, and it identifies difficulties the United States may face in meeting Chinese expectations.

How to Sustain Mutual Vulnerability at the Nuclear Level?

To Chinese experts, a US commitment to mutual vulnerability would convey the message that Washington would not seek to undermine China's nuclear second-strike capability deliberately. This is important since many Chinese experts worry genuinely that Washington seeks to acquire "nuclear primacy" and wants to neutralize China's second-strike capabilities.[17]

According to Chinese experts, the United States' interest in nuclear primacy results from its intent to achieve "absolute security," an aspiration to make the United States invulnerable to any potential nuclear threat while leaving its enemy vulnerable to US nuclear threats.[18] To China, such US thinking is a reflection of its pursuit of hegemonism—a problem inherent to US strategic culture that only the United States can address.[19] According to the mainstream Chinese view, until Washington comes to its senses on the fallacy of absolute security, there is little Beijing can do to address this problem; in the meantime, China has to continue strengthening its nuclear capabilities to contain the US temptation to pursue nuclear primacy.

Under such conditions, the two sides face at least three challenges in agreeing on how to sustain mutual nuclear vulnerability.

First, even if Washington accepts mutual vulnerability, the two countries would still need to provide a basic level of transparency to demonstrate their genuine interest in and consistent commitment to sustaining a mutually vulnerable nuclear relationship. Profound bilateral political distrust, however, presents a significant obstacle to providing reassurance through transparency. As Beijing becomes increasingly concerned about growing threats to regime security from Washington, any revelation of its policy deliberation on security matters—especially those related to nuclear weapons—is seen increasingly to carry a risk for national security. Just as the United Kingdom has decided to curtail the level of transparency over its nuclear stockpile due to perceptions of a more uncertain security environment, China appears to have chosen to increase its traditional reliance on secrecy in a perceived hostile environment. For example, China's most authoritative national media sources—including the *People's Daily*—officially deny the existence of new nuclear missile silos that were identified by independent US scholars and presumably built for the purpose of deploying intercontinental ballistic missiles (ICBMs).[20] Similarly, the Chinese foreign ministry spokesperson appeared to refer to a July 16, 2021 launch of a civilian space vehicle to deny reports that China tested an orbital hypersonic weapon system on July 27, 2021.[21] Having refused to acknowledge, let alone confirm, these reported capability developments, China appears unlikely to provide significant quantitative and qualitative transparency about the status and planning of its nuclear arsenal for the foreseeable future. Understandably, the lack of Chinese transparency would increase the sense of uncertainty in the United States about the end goals of Chinese nuclear buildup and probably heighten US suspicions of Chinese development of nuclear first use capabilities and doctrines.

Similarly, increasing Chinese efforts to tighten domestic regulations on information confidentiality aim at preventing its rivals from understanding

[17] Xu, Jia (许嘉), and Heng (张衡) Zhang, "The Trend of American Nuclear Policies' Adjustments and Its Influences after the Cold War (冷战后美国核政策的调整趋势及影响)," World Economics and Politics (世界经济与政治), no. 3, 2011, pp. 55-65.

[18] Fan, Huafeng (凡华锋), "The So-Called 'Absolute Advantage' Does Not Bring Absolute Security (所谓"绝对优势"带不来绝对安全)," *PLA Daily* (解放军报), December 6, 2020, 004.

[19] Shi, Bin (石斌), "American Security Perceptions and Strategic Traditions in the Nuclear Age—A Re-Examination of Two Classic Texts (核时代的美国安全观念与战略传统——对两个经典文本的重新探讨)," *Journal of Historical Science* (史学月刊), no. 9, 2018, pp. 101-22.

[20] *People's Daily*, @人民日报, Weibo, "Round Circles on Chinese land Scared the Americans" (中国地面上的圆圈圈把美国人吓坏了), July 7, 2021, https://weibo.com/tv/show/1034:4656333639843882?from=old_pc_videoshow; Joby Warrick, "China Is Building More Than 100 New Missile Silos in Its Western Desert, Analysts Say," *Washington Post*, July 1, 2021.

[21] Demetri Sevastopulo, "Chinese Hypersonic Weapon Fired a Missile over South China Sea," *Financial Times*, November 22, 2021.

Chinese policy objectives and deliberations.[22] These measures seek to strengthen deterrence by keeping China's enemies guessing about Chinese goals and strategies. However, exactly because the United States would have a reduced capacity to evaluate Chinese goals and to understand Chinese thinking due to such measures, Washington could have less confidence in a Chinese commitment to mutual nuclear vulnerability.

Second, the two countries face significant difficulty in reaching shared understandings about the impacts of new strategic technologies, which would lead to divergent views about each other's compliance with mutual vulnerability. China believes that its relatively small nuclear arsenal faces growing threats from a wide range of non-nuclear US military technologies, such as missile defense, conventional precision strike weapons, advanced remote sensors, artificial intelligence, and cyber weapons, among others. US experts do not reject the possibility that such non-nuclear capabilities could have a potential impact on Chinese nuclear forces, but the two countries' expert communities do not agree on the degree of that impact.

Because of China's distrust of US strategic intentions, Chinese technical experts tend to use worst-case scenario thinking to evaluate the potential impact of US non-nuclear capabilities on Chinese nuclear deterrent. The US-Chinese dispute over the impact of the deployed Terminal High Altitude Area Defense (THAAD) missile defense battery in South Korea is an example. In this case, Chinese technical experts, doubtful of US strategic intentions, believe that the THAAD radar can monitor Chinese long-range missile launches and undermine China's nuclear deterrent by helping US homeland missile defense interceptors home in on Chinese nuclear warheads. These technical allegations were dismissed by US officials as unsound and disingenuous, which then reinforced Chinese suspicions about US intentions. This episode demonstrates how political distrust led to divergent understandings on technical issues, which then further contributed to greater political distrust.[23]

Worst-case scenario thinking likely will cause bigger perception gaps on key technical issues that affect bilateral strategic stability in the future. The hostile bilateral relationship has also created a domestic environment in which Chinese experts feel reluctant to review any US policy positively, or to review any Chinese policy critically. A similar phenomenon may exist in the US expert community. The impact of the domestic political atmosphere on the capacity of expert communities—let alone decision-makers—to develop accurate mutual understanding is much more serious than many people acknowledge. The tightening of visa criteria, domestic security rules, and confidentiality regulations will only make substantive exchanges between the two countries' expert communities more difficult to convene and less capable to clarify possible technical misunderstandings. Growing perception gaps will likely reinforce both countries' suspicion that the other side is distorting facts deliberately at the technical level to achieve competitive advantage. Such suspicions could reduce both countries' confidence in the other party's actual maintenance of mutual nuclear vulnerability even if such a relationship is accepted explicitly.

"Because of China's distrust of US strategic intentions, Chinese technical experts tend to use worst-case scenario thinking to evaluate the potential impact of US non-nuclear capabilities on Chinese nuclear deterrent."

Third, it is unclear what types of US signals would reassure China that the United States is committed to mutual vulnerability. Previous US administrations made various official statements to reassure China. For example, in addition to the Obama administration's commitment to "maintaining strategic stability in the US-China relationship" in the 2010 Ballistic Missile Defense Review Report,[24] the Trump administration reaffirmed in the 2019 Missile Defense Review Report that "[t]he United States relies on nuclear deterrence to address the large and more sophisticated Russian and Chinese

[22] Minnie Chan, "China's Military Tightens Secrecy Rules as PLA Steps up Exchanges Abroad," *South China Morning Post*, February 19, 2020.
[23] Tong Zhao, "The Perception Gap in the THAAD Dispute—Causes and Solutions" in Jisi Wang (ed.), *China International Strategy Review 2017*, Beijing: International Strategic Institute, Peking University, November 2018, pp. 371-389.
[24] *Ballistic Missile Defense Review Report*, Washington DC, Department of Defense, 2010, p. 34.

intercontinental ballistic missile capabilities,"[25] thereby rejecting the notion that Washington seeks to use missile defenses to undermine Chinese strategic nuclear deterrent. Admittedly, these statements stop short of accepting a mutual vulnerability relationship with China. But they do contain some of the key elements of a mutual vulnerability relationship.

That said, these official commitments do not seem to have alleviated Chinese concerns that the United States pursues nuclear primacy. Especially when the Trump administration began implementing a tougher policy on China, the US commitment not to use missile defenses to counter Beijing's nuclear threat sounded hollow to Chinese nuclear experts. Similarly, the Chinese government has made repeated official commitments that it "will never take part in any nuclear arms race."[26] But such commitments have not allayed US concerns about Chinese nuclear buildup, especially in recent years when the overall relationship became more adversarial.

It is therefore unclear whether rhetorical assurances would work as effectively as some Chinese experts have hoped.[27] A US declaratory policy that states a commitment to mutual vulnerability probably would not be sufficient to convince China that the United States has abandoned the pursuit of nuclear primacy.

Chinese officials have stressed the importance of reaffirming the notion that "nuclear war cannot be won and must never be fought,"[28] and some Chinese nuclear experts also see a US willingness to reiterate publicly with Beijing this "Reagan-Gorbachev declaration" as an indicator that the United States accepts mutual vulnerability with China.[29] But it is unclear if such a statement would be a sufficient condition for Beijing to acknowledge the credibility of a US commitment to mutual vulnerability.

If the reiteration of the Reagan-Gorbachev declaration is not sufficiently reassuring, what other commitments would Beijing also want Washington to make? Would Beijing be satisfied with explicit US adoption of no-first use (NFU) policy as a credible signal of commitment to mutual vulnerability? Or does Beijing need to see concrete US measures, such as cutting its nuclear arsenal to a much lower level, removing certain types of weapons—such as low-yield weapons—from the US arsenal, or limiting US missile defenses?

Washington needs to know the Chinese expectations of what constitutes credible US commitment to mutual vulnerability at the nuclear level before it makes such a commitment. So far, China has not elaborated its thinking and Chinese decisionmakers and strategists may not have conducted deep reflections on how it wants to be reassured.

For instance, there is ambiguity in Chinese thinking on whether China's pursuit of mutual vulnerability with the United States is primarily aimed at minimizing the risk of US nuclear first use on China. According to Chinese public statements and expert writings, China's pursuit of mutual vulnerability and its demand for a US commitment to NFU appear to be two sides of the same coin.[30] If the two demands serve the same goal, the Chinese interest boils down to the issue of how Washington can reassure Beijing that it will not use nuclear weapons first in a conflict. In this regard, as discussed above, it is unclear if Beijing is seeking a US NFU or substantial reduction of US strategic capabilities that could enable nuclear first use.

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[25] Missile Defense Review Report, Department of Defense, Washington DC 2019, p. vii.

[26] "China's Endeavors for Arms Control, Disarmament and Nonproliferation," Beijing: The Information Office of China's State Council, 2005; "Geng Shuang: Asking China to Participate in the 'Trilateral Arms Control Negotiation' Is Unfair, Unreasonable, and Unfeasible," Chinese Mission to the United Nations, https://www.fmprc.gov.cn/mfa_eng/wjb_663304/zwjg_665342/zwbd_665378/t1823444.shtml

[27] Wu Riqiang. "Stabilizing China-U.S. Nuclear Dynamics," The National Bureau of Asian Research, September 26, 2015; Luo, Xi (罗曦), "Arms Control Issue Moves up on China-US Strategic Dialogue Agenda List (军控议题在中美战略对话清单上位置前移)," *World Affairs (世界知识)*, no. 9, 2019, pp. 62-63.

[28] "Statement by Ambassador Fu Cong, Director-General of the Department of Arms Control of the Ministry of Foreign Affairs of China, at the General Debate of the First Committee of the 74th Session of the UNGA," New York: Ministry of Foreign Affairs, October 12, 2019.

[29] Wu Riqiang, "It seems to me that US is willing to reiterate the Reagan-Gorbachev principle with Russia, but not with China. Q: Can US do arms control with China without recognizing/accepting mutual vulnerability?" June 17, 2021, https://twitter.com/WuRiqiang/status/1405309072111439876

[30] Lu Yin, "Establishing New China-US Strategic Stability: Opportunities and Challenges," Atlanta, GA: Program On Strategic Stability Evaluation (POSSE), 2012; Luo Xi (罗曦), "Could Biden's Nuclear Policy Proposals Offer Opportunity to Reshape US-China Strategic Stability (拜登的核政策主张能否为重塑中美战略稳定提供契机)," *World Affairs* (世界知识), no. 1, 2021, pp. 35-37; Zou Zhibo (邹治波) and Wei (刘玮) Liu, "Constructing a Framework for China-US Nuclear Strategic Stability: A Perspective of Asymmetric Strategic Balance (构建中美核战略稳定性框架: 非对称性战略平衡的视角)," *Journal of International Security Studies* (国际安全研究), vol. 37, no. 1, 2019, pp. 40-59; Pan Zhenqiang, "China's No First Use of Nuclear Weapons" in Li Bin and Tong Zhao (eds.) *Understanding Chinese Nuclear Thinking* (Washington DC: Carnegie Endowment for International Peace, 2016).

Even if Washington manages to convince Beijing that the United States will not conduct nuclear first use on China, whether this reassurance will remain credible in the future also depends on how China's military strategy evolves. If China develops conventional intercontinental-range strike capabilities against the United States—something some US experts suspect China may be interested in doing [31]—it would generate new incentives for Washington to develop countermeasures, such as additional missile defense capabilities against the new conventional strategic threat. Under such conditions, the US expansion of its missile defenses would not aim at countering China's nuclear capabilities, but it could raise Chinese concerns. In other words, China's self-restraint in not only nuclear capabilities but some non-nuclear strategic capabilities might be necessary to maintain mutual vulnerability with the United States. There is no indication that Beijing agrees with this notion or that it would be willing to restrain its further development of non-nuclear strategic capabilities.

"Even if Washington manages to convince Beijing that the United States will not conduct nuclear first use on China, whether this reassurance will remain credible in the future also depends on how China's military strategy evolves."

Would Mutual Vulnerability Cover China's "Core Interests?"

Another key uncertainty in Chinese expectations revolves around the relationship between mutual vulnerability and a US commitment to respect China's "core interests." To Chinese experts, a US commitment to mutual vulnerability is important because it would imply that the United States would abandon "absolute security," accept peaceful co-existence with China, and respect China's core interests. But the exact meaning of accepting peaceful co-existence and respecting China's core interests has been ambiguous.

It is unclear whether China expects the United States to respect Beijing's regime security by promising not to support the subversion of the Chinese Communist Party. To Beijing, "regime security is at the core" of its national security and takes priority over everything else. [32] From the Chinese perspective, Western efforts to uphold values such as human rights and democracy are aimed at challenging China's political system and threatening China's regime security by promoting a "color revolution." China may believe peaceful co-existence with the United States would require Washington to drop its criticisms of Beijing over issues of human rights, rule of law, individual liberty, democratic rights, and rules-based international order, among other things. An increasingly popular view in China holds that a bigger nuclear arsenal would make the United States "respect China" and stop interfering in China's "internal affairs." [33] Such an expectation from Beijing would be problematic for Washington, which sees upholding universal values as part of the US national identity.

In addition, the two countries likely have divergent expectations about how mutual vulnerability should affect China's conventional military behaviors in Asia. The United States is sensitive to its allies' concerns that US-China mutual nuclear vulnerability could embolden Chinese conventional military aggressiveness after US nuclear escalation is taken off the table.[34] As China's conventional military power continues to grow and solidify the military balance in the region increasingly to China's favor, US allies' concerns have deepened. Therefore, Washington would probably seek reassurance from Beijing that China would restrain its conventional military behaviors and address security concerns of US allies as a condition for the United States to accept mutual vulnerability formally.

[31] Roderick Lee, "A Case for China's Pursuit of Conventionally Armed ICBMs," *The Diplomat*, November 17, 2021.

[32] Yang, Dazhi (杨大志), "Political Security Is the Root of National Security (政治安全是国家安全的根本)," *PLA Daily* (解放军报), https://www.ccps.gov.cn/xxsxk/xzx/201812/t20181220_126392.shtml

[33] Hu Xijin (胡锡进), "What Hu Xijin Sees That Made Him Strongly Advocates China's Expansion of Nuclear Forces (胡锡进看到了什么，强烈主张中国扩大核力量)," *Global Times*, May 9, 2020.

[34] Tong Zhao, "US-China Strategic Stability and the Impact oof Japan: A Chinese Perspective" in James L. Scoff and Li Bin, *A Precarious Triangle: US-China Strategic Stability and Japan* (Washington, DC: Carnegie Endowment for International Peace, November 2017).

However, Beijing rejects the notion that its effort to enhance military control over disputed territories is illegitimate or a threat to the region. For Beijing, achieving national unification and territorial integrity constitutes China's core interests, and there is no room for compromise on these issues. Some Chinese experts see a causal linkage between China's nuclear expansion and its goal to advance control over claimed territories, including to achieve unification with Taiwan through military means if necessary. In other words, to ensure the United States would not intervene in Chinese conventional military activity to strengthen territorial control and achieve unification with Taiwan may be an important driving force behind Beijing's pursuit of mutual vulnerability relationship with Washington. So, if Washington commits to mutual vulnerability but continues to support its allies and friends on regional security issues, the United States and China would probably have continuous disputes over whether the other side has fulfilled its commitment.

Should North Korea Matter?

Finally, it is unclear whether Beijing thinks Washington has a legitimate interest in protecting itself and its allies from North Korea's nuclear threats. North Korea's growing nuclear program has been a major obstacle for the United States to reassure China that it does not seek to deliberately undermine its nuclear second-strike capabilities. Washington feels obligated to develop and deploy missile defense systems to counter North Korea's growing nuclear capabilities, but Beijing believes that those same US missile defenses could undermine China's nuclear deterrent. Many Chinese experts suspect that the United States has been using the North Korean nuclear program as an excuse to develop and deploy missile defenses against China. That's why China has decried US missile defense programs.

But it is unclear how Beijing expects Washington to address the North Korean nuclear threat, or whether Beijing even thinks Washington has a legitimate need or right to address the North Korean threat. Beijing blames Washington for failing to address North Korea's threat perception and for causing Pyongyang to pursue nuclear weapons. But as it becomes increasingly clear that North Korea is determined to build and maintain a credible nuclear deterrent capability for the long run and has little interest in nuclear disarmament for the foreseeable future, it remains unclear how Beijing thinks Washington and its allies should protect themselves from Pyongyang's growing nuclear capabilities, or whether North Korea should matter in US nuclear and missile defense planning. Under current circumstances, even if Washington commits to mutual vulnerability with Beijing, the two sides would still have serious disputes about whether Washington could build missile defenses in response to North Korea's nuclear development, and therefore whether Washington had fulfilled its mutual vulnerability commitments to Beijing.

Conclusions

Beijing's anxiety about the US threat of nuclear escalation in a conventional conflict and the US interest in neutralizing China's nuclear deterrent is a significant driver of Chinese comprehensive nuclear modernization. US acknowledgement of the *de facto* existence of mutual nuclear vulnerability relationship with China could help mitigate such anxiety and stabilize the bilateral nuclear relationship.

There are significant limits, however, mostly because political-level factors have become a primary driver of China's strategic threat perception in recent years. Chinese threat perception appears to have a more direct impact on its accelerated nuclear investment than any specific developments in US nuclear policy.

"Beijing's anxiety about the US threat of nuclear escalation in a conventional conflict and the US interest in neutralizing China's nuclear deterrent is a significant driver of Chinese comprehensive nuclear modernization."

More importantly, it is unclear what specific expectations China has about mutual vulnerability, including how the two sides should maintain mutual vulnerability at the nuclear level, and what US and Chinese obligations would be under such a relationship. It is in China's interest to conduct a systematic internal deliberation about its expectations of mutual vulnerability. Without aligning Chinese and US expectations about the meaning and implications of sustaining mutual

vulnerability, US acceptance of it would not improve the situation as the two sides would have continuous disputes about each other's compliance with commitments.

Looking ahead, given the Chinese interest in mutual vulnerability, the two sides should begin a dialogue to clarify expectations. Such dialogue should also consider what reciprocal reassurances might be expected of China regarding addressing the concerns of the United States and its allies. A US decision to accept mutual vulnerability formally probably will not happen until these substantive and difficult issues are resolved, and dialogue on mutual vulnerability could bring clarity to the expectations and challenges perceived by both sides. At the very least, dialogue could help drive home the point that US acceptance of mutual vulnerability is not solely a US decision and that China has an important role to play in influencing US thinking.

Conclusions: The Future of Mutual Vulnerability in US-China Strategic Nuclear Relations

David Santoro

There has been little recent scholarly work about US-China mutual vulnerability and US policy options in this regard. This volume has sought to plug this gap, providing analysis on this issue, and debating the question whether the United States should acknowledge mutual vulnerability with China. This concluding chapter discusses the volume's key findings and the insights that can be teased out from those findings.

Key Findings

The basic findings of the volume are fourfold:

Finding #1: Mutual Vulnerability is a Fundamental Question

At the most general level, the analyses provided in each of the eight chapters have made clear that mutual vulnerability is a fundamental question in strategic nuclear relations, especially between major powers. It is, and has been for a long time, the foundation upon which the United States and the Soviet Union, and then the United States and Russia, have organized and managed their strategic nuclear relationship, certainly in principle, but also to some extent in practice.

So, it is not surprising that this question also features prominently in US-China strategic nuclear discussions today, especially now that China is well on its way to becoming a major nuclear-armed power; China already is, in many ways, a near-peer nuclear competitor to the United States.[1] Significantly, for all its talk about the need for Washington to abandon a "Cold-War mentality," China has cared consistently about establishing a mutually vulnerable relationship with the United States akin to the one that exists in the US-Russia relationship (and before that in the US-Soviet relationship).

The mutual vulnerability question, then, is here to stay. It is and will remain central to US-China strategic nuclear interactions.

Finding #2: Mutual Vulnerability is Often Misinterpreted

Paradoxically enough, however, the mutual vulnerability question is often misunderstood, primarily because it has been understudied. Much of the national security community in the United States and possibly even in China and elsewhere often makes grand (and false) assumptions about what mutual vulnerability is and how it developed and has worked in the US-Soviet and then US-Russia relationship. On that basis, strategists then extrapolate to what might happen or, worse, is likely to happen in the US-China context, even though the US-China strategic nuclear relationship is considerably different from what the US-Soviet strategic nuclear relationship ever was (and what the US-Russia strategic nuclear relationship currently is).

Contrary to the conventional wisdom, a historical review shows that acknowledging mutual vulnerability is far from straightforward and, significantly, that it is no guarantee of greater stability between its parties, even though it can present benefits in some circumstances; it can set the stage for arms control and then help facilitate it, for instance. Significantly, in concluding her analysis on the Cold-War record, Heather Williams stresses that "Any acknowledgement of mutual vulnerability…should be taken with a grain of salt because it will not signal acceptance of parity or abandonment of the quest for superiority."

Finding #3: Mutual Vulnerability in the US-China Context Isn't Going to Be Settled Rapidly

The mutual vulnerability question is not settled in the US-China context, and it is unlikely to be settled any time soon.

US strategists disagree about the value and utility of the United States acknowledging mutual vulnerability with China. Brad Roberts argues that it is "a more promising approach" than the alternatives (rejecting it outright and pursue superiority, or continued indecision) because, despite declining benefits and potential costs and risks, it could act as an enabler of stabilizing competition and, more importantly, would likely help the United States and its allies better advance their interests vis-à-vis China. By contrast, Matthew Costlow contends that the United States "should continue to pass on such a declaration" because it "promises falsely to fix quickly a fundamentally complex and competitive relationship." Costlow stresses that in addition to

[1] The United States maintains nuclear supremacy over China; it has a quantitative advantage, i.e., many more nuclear warheads. China, however, has perfected and diversified its arsenal, especially in recent years, giving Beijing near-peer status with Washington from a qualitative standpoint. See David Santoro (ed.), *US-China Nuclear Relations—The Impact of Strategic Triangles* (Boulder, CO: Lynne Rienner, 2021).

tightening its defense relationship with its allies, the United States is better off committing fully to nuclear modernization to force China to the arms control negotiating table.

Key US allies, meanwhile, see potential upsides to a "vulnerability acknowledgement" if, and only if, it strengthened stability. Seong-ho Sheen, for instance, explains that South Korea would "likely see benefits if its effect is the stabilization of US-China strategic nuclear relationship." Allies are also deeply worried that the costs and risks might be prohibitive, however. Rod Lyon expresses doubts that it would lead to stabilization and warns against the dangers of making a decision that could appear to reward Beijing for its rapid nuclear build-up and undercut extended deterrence; he stresses that such a development would be "problematic" for Australia. Masashi Murano concurs, highlighting "issues pertaining to deterring China in a context in which US-China mutual vulnerability increases" and pointing out that it is especially concerning in a context in which "there has been a growing unease in Japan about US extended deterrence."

Regardless of these "strategic" disagreements and concerns, the sharp deterioration of the global security environment, especially of US-China and US-Russia relations (further complicated by the deepening of China-Russia strategic cooperation), makes it unlikely that the United States will find the political appetite and capital to make a vulnerability acknowledgement with China. The reason is simple: many would assert, rightly or wrongly, that making such an acknowledgement is evidence that the United States is "weak" on China.

Opting for superiority or dominance over China, meanwhile, is unlikely to happen as well because it would require developing and deploying systems that the United States has ruled out systematically. Washington has been consistently reluctant to develop missile defenses to protect against Beijing's (and Moscow's) arsenals, for instance. The latest US *National Security Strategy* is crystal clear about this, stating that "Enhanced missile defense is not intended to undermine strategic stability or disrupt longstanding strategic relationships with Russia or China."[2] There is little indication that Washington will change its approach. For now, therefore, continued US indecision, i.e., more of the same, is the most likely course of action.

The mutual vulnerability question, in short, is likely going to remain unsettled, at least for the time being.

Finding #4: Asking the Mutual Vulnerability Question in the US-China Context is Useful

Notwithstanding this conclusion, exploring the benefits, costs, and risks of opting for or rejecting mutual vulnerability with China is immensely useful because it forces the US national security community to reflect on the type of strategic nuclear relationship that Washington should pursue (and can have) with Beijing. Because, as argued early, it is so fundamental, asking the mutual vulnerability question compels the United States to identify, and distinguish between, the realm of the desirable and that of the possible in its strategic nuclear relationship with China. This is important, and a distinction that so far Washington has been reluctant to make in any systematic manner. The focus of US policy has been overwhelmingly on "competition against China," even though the United States has, in more recent years, opened the door to potential bilateral cooperation in certain niche areas.

To be sure, strategists will draw very different—and sometimes even polar opposite—conclusions to the mutual vulnerability question, as is the case of Brad Roberts and Matthew Costlow in this volume. Asking that question at this critical juncture in US-China strategic nuclear relations, however, is useful because it helps sharpen what US goals and priorities can and should be vis-à-vis China, beyond the loosely defined "major power competition" framework.

Key Insights

What insights can now be teased out from these four findings? What are the broader implications for policy, notably for US policy?

Five stand out:

1. Fundamentals and Principles of Mutual Vulnerability

- A mutual vulnerability statement describes an uncomfortable reality. When states make a statement recognizing that they are

[2] *National Security Strategy of the United States of America* (Washington, DC: White House, 2017), p. 8.

mutually vulnerable, they do so to ensure that they see eye-to-eye about that reality.

- A mutual vulnerability statement also describes strategic intent. States making such a statement commit, more or less explicitly, to organizing their relationship according to that reality in an effort to increase strategic stability and predictability.

- A mutual vulnerability statement, therefore, commits its parties to refraining from taking actions that would or could alter the current state of affairs. More specifically, such a statement seeks to maintain a strategic balance between its parties; it rules out, at least in theory, the pursuit of superiority or dominance of one party over another (or others).

- Details matter. Acknowledging mutual vulnerability is different from accepting it. In the same vein, acceptance does not mean permanent acceptance; it is probably unrealistic to expect states to endorse permanent acceptance.

- States always reluctantly acknowledge, let alone accept, that they are mutually vulnerable. Even when they do, they often try to escape that situation in various ways either because they worry about new technological developments that will checkmate them, or because they fear that the other party (or parties) might cheat on their commitment not to seek superiority or dominance over them. There is thus often a discrepancy between their words and deeds.

- Mutual vulnerability traditionally describes mutual *nuclear* vulnerability. But it now increasingly encompasses several other weapon systems (advanced conventional weapons, hypersonic weapons, etc.) as well as new domains (cyber, space) of strategic significance, and even extends beyond the military, especially in the US-China context. This volume has focused on the "strategic-nuclear" dimension, but there is potential for research that adopts a much broader approach to US-China mutual vulnerability.

- It is difficult, yet perhaps not impossible, to insulate the strategic-nuclear dimension and the mutual vulnerability question from all other developments and dynamics (and their sources) in the broader US-China relationship. Tong Zhao suggests as much in his chapter, arguing that "absent efforts to address underlying causes of US-China rivalry, US acknowledgement of mutual vulnerability may have only limited impact on Chinese nuclear strategy."

<u>2. Expect the Mutual Vulnerability Question to Remain Central in US-China Strategic Nuclear Relations, and Prepare for It; Do Not Dismiss It</u>

- While it is unlikely to be settled any time soon, the mutual vulnerability question will haunt US-China strategic nuclear relations and probably gain increasing salience because China's military power is rising fast relative to the United States'. In other words, the United States and China are becoming increasingly mutually vulnerable at the strategic-nuclear level (and beyond), and that trend will likely continue. The United States should come to grips with that fast-changing reality.

- The United States should be clear-eyed about its choices. They are threefold: Washington can embrace mutual vulnerability, i.e., acknowledge and accept it as a reality; it can reject it and do everything it can to try and escape it; or it can maintain its current approach, i.e., decide not to decide what it wants to do. Each of these choices presents important benefits, costs, and risks; none provides a silver bullet.

- Business-as-usual might be the most problematic option. Looking ahead, the United States will likely have to make tough choices about its approach to "nuclear China" either by embracing or (de facto) rejecting mutual vulnerability. Failure to do so, i.e., sticking with continued indecision, would likely cost the United States because it would prevent Washington from deciding for itself (and therefore shaping) the strategic nuclear future it wants with Beijing.

3. The "Why" to Choose, or Reject, Mutual Vulnerability Is as Important as the "How" to Do It

- The benefits, costs, and risks associated with the decision to opt for or reject mutual vulnerability are intimately connected to *how* that decision is both made and implemented. As Lewis Dunn put it in concluding his chapter, "the question whether to acknowledge mutual vulnerability cannot be separated from the question of how to do so…that "how question" is integrally related to the issue of what benefits, if any, the United States could reap from such an acknowledgement, and if those benefits would outweigh the costs of doing so."

- Pay attention, then, to the ways and means. Regardless of whether the United States endorses or rejects mutual vulnerability, what follows can be either a success, a failure, or a mixed outcome not just because of the specific policy choice Washington makes, but also because of how it makes and implements that choice. This is an important point because discussions about this question have focused overwhelmingly on *whether* it makes sense to go for mutual vulnerability, much less so *how* to do it.

- Start with the ends, however. Whether the United States embraces or rejects mutual vulnerability (or even opts for continued indecision), beginning with defining the ends—the goals—is essential because it is the first step to developing a workable strategy, the "how," to achieve them. Moreover, in addition to defining what success looks like, it is critical to flesh out what constitutes failure and a mixed outcome to know what to avoid, and what would be acceptable (as opposed to ideal).

- Expect little in the short term. The United States should accept that, in either case, the deliverables will be largely unclear or limited, and possibly for a long time. In other words, the road after choosing or rejecting mutual vulnerability will be the start of a long process, not the end. The United States should expect developments to be slow. In these circumstances, it should not expect questions about why and how to maintain its chosen course of action to go away any time soon.

4. Balancing US Policy Towards China and US Policy Towards Allies Will Be Challenging Regardless of the Decision to Choose or Reject Mutual Vulnerability

- Accept that the decision to embrace or reject mutual vulnerability both include trade-offs, sometimes difficult trade-offs, notably between US policy towards China and US policy towards allies. Neither decision is more painless than the other. In either case, the United States will need to spend time explicating its choice and, in the case of its allies, reassuring them that their security is maintained, perhaps even enhanced.

- Consult with allies before deciding to either endorse or reject mutual vulnerability and ensure that there is (sufficient) backing in key capitals. Doing so will not only reduce allied anxieties about the US choice, but it will also increase the odds that allies will be prepared to assist when and if they are needed to implement the decision.

- Focus on what will best advance US interests and those of US allies. Some may believe that embracing mutual vulnerability makes sense because it would make China more amendable to strategic nuclear dialogue. Others, meanwhile, may think doing so would lead China to ask for more concessions from the United States, without delivering any of its own. Both are misguided approaches. Rather, the decision to choose one course of action over the other should be made based on whether and how it benefits the United States and its allies. To be sure, there is a variety of views about how best to promote US and allied interests, but the reflection should be laser-focused on these considerations.

5. Do Not Lose Sight of the Bigger Picture; US-China Strategic Relations Evolve in an Era of Nuclear Multipolarity

- Expect knock-on effects. Deciding to go for or reject mutual vulnerability with China will likely have important implications beyond the sole US-China strategic nuclear relationship. At the most general level, an

attempt to go for mutual vulnerability would signal that there is a pathway to nuclear diplomacy, whereas rejecting it (even de facto) would suggest that the focus is more squarely on nuclear deterrence. Other states, notably Russia and North Korea, will notice and likely adapt their policy and perhaps even their posture in response because the US decision will affect them either way.

- Explore ways to address the mutual vulnerability question at the multilateral level. The five permanent members of the United Nations Security Council recently repeating the Reagan-Gorbachev statement that "A nuclear war cannot be won and must never be fought" may provide a baseline to jump-start that discussion.

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