

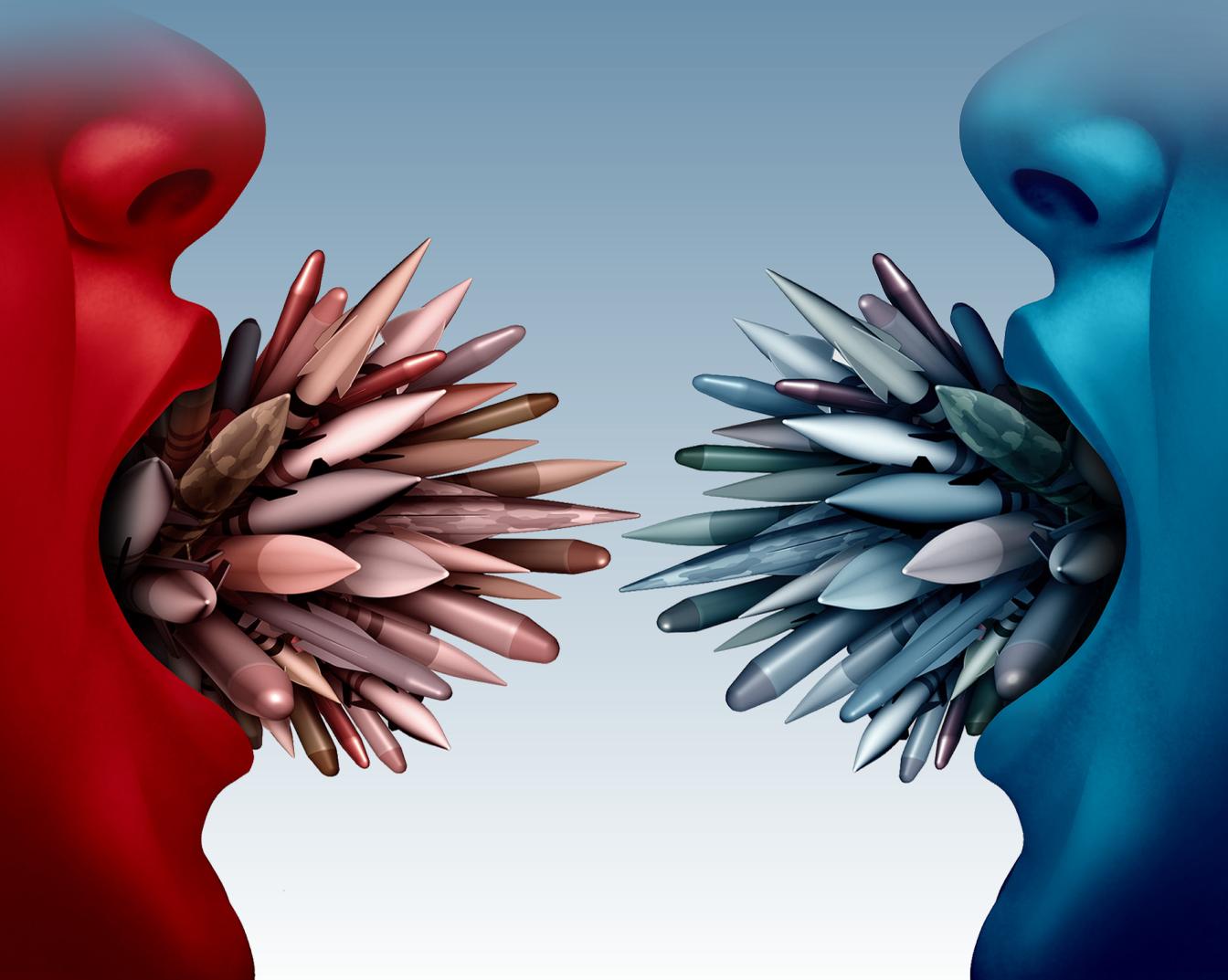
TAKING STOCK

U.S.-CHINA TRACK 1.5

NUCLEAR DIALOGUE

BRAD ROBERTS, EDITOR

Center for Global Security Research
Lawrence Livermore National Laboratory
December 2020



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Introduction

Brad Roberts

From 2004 to 2019, experts from the United States and China came together once or twice a year to discuss nuclear policy. Of the 22 total meetings, half were convened in Beijing and half in Hawaii, with each venue offering particular benefits to the dialogue (in Beijing, direct access to interested stakeholders, in Hawaii a less formal setting and a shared jet-lag burden). Participants included experts from think tanks and academia as well as former and current officials participating in their private capacities. The U.S. and Chinese militaries were also represented at junior and senior levels. Both sides also used the process to encourage the development of successor generation interest and expertise. Over this same period there were only a very small number of nuclear-focused meetings at the official level. This was essentially the only game in town. Such mixed gatherings are referred to as Track 1.5, as opposed to Track 1 (when officials gather for official purposes) or Track 2 (when academic experts meet).

On the U.S. side, the dialogue was supported financially by the Department of Defense [via the Defense Threat Reduction Agency (DTRA)]. Each session was co-organized by one or more U.S.-based think tanks and a Chinese counterpart.¹ Over 15 years, DTRA invested approximately \$5 million in the process. In 2019, DTRA terminated its support following declining Chinese participation and growing U.S. frustration with China's failure to agree to an official dialogue. As of late 2020, whether, when, and how to resume official bilateral dialogue remain open questions.

To inform thinking about these questions, CGSR proposed to bring together the core group of participants from both sides to take stock of the dialogue process. On September 21 and 22, we convened a virtual workshop involving a dozen experts from each country. Toward that end, CGSR partnered with the China Arms Control and Disarmament Association (CACDA) to organize the event. Our primary purposes were to:

- review and take stock of two decades of nuclear-focused dialogue
- better understand the existing bilateral strategic military relationship
- identify emerging problems and opportunities to improve that relationship

This report is the result. It includes the four discussion papers prepared for the event (as subsequently revised in light of the discussion) as well as a summary that highlights main themes. The list of participants is included in Appendix 1.

¹ Over the years DTRA enlisted various organizations in the convening role, including the Center for Strategic and International Studies, the Institute for Defense Analyses, Pacific Forum, and the RAND Corporation, with the primary role for many years played by Pacific Forum. For the meetings in Hawaii, the convening organization was the Naval Postgraduate School. The primary co-convenor on the Chinese side has been the China Foundation for International Strategic Studies.

Two of the papers look to the past. Authors were asked to address the following questions:

- Looking back over two decades of dialogue, what were the main phases?
- Which topics proved enduring and which dropped off of our agendas?
- What did we learn about the strategic policies and thought of the other country?
- What did we learn about our own strategic policies and thought?

The other two papers look to the future. Authors were asked to address the following questions:

- What is the state of the bilateral nuclear relationship and of the broader strategic military relationship?
 - In what direction is it headed?
 - What are the emerging problems and opportunities requiring attention?
- How can we best make progress in addressing these problems and opportunities?
 - What has—and hasn't—worked to improve strategic dialogue?
 - What is the proper balance between Track 1 and 1.5?

All four papers also had something to say about the present state of the bilateral strategic military relationship.

Let me underscore that all of the views expressed here are the personal views of the authors. They should not be attributed to Lawrence Livermore National Laboratory, any of its sponsors, or any other organization with which the authors may be affiliated. The views expressed here are also personal views in the sense that they do not reflect consensus among the national “teams.” No effort was made to develop such consensus views and the September dialogue again reminded us of the variety of views within each group on many topics.

I am grateful to the contributors to this paper for their efforts on our collective behalf. I am also grateful to my partners at CACDA for their very effective partnership: Ambassador Zhang Yan, CACDA chairman, and Zhou Chang, its director of research. Many thanks to our note-takers from CGSR: Anna Péczeli, Brian Radzinsky, Ryan Swan, and Brandon Williams. Finally, let me express my gratitude to the full binational team for 15 years of informative and often spirited collaboration. Our progress in developing mutual understanding, mutual trust, and habits of cooperation has been immensely rewarding.

Taking Stock: The Past, Present, and Future of U.S.-China Nuclear Dialogue

Yao Yunzhu

Before the fast deterioration of China-U.S. relations at the end of 2017, there were numerous official Track 1, unofficial Track 2, and mixed Track 1.5 dialogue and exchange mechanisms on almost every issue between the two countries. Even on highly sensitive issues related to nuclear weapons, there have been dialogues and exchanges between national labs, scientists, government officials, retired and active military officers, and experts and academics from think tanks and universities. Some proved short-lived. The lab-to-lab exchanges were halted in 1998 by the U.S. side following allegations of technology theft in a Congressional report (the Cox Report).² An official discussion on nuclear issues between the U.S. Department of Defense and the People's Republic of China (PRC) Ministry of National Defense (MND) proved to be a one-time occurrence in 2008. Some continued for decades. A "U.S.-China Conference on Arms Control, Disarmament, and Nonproliferation," sponsored by the U.S. Department of State, continued from 1998 to 2016 at the Middlebury Institute of International Studies in Monterey. The CSGAC-CISAC Dialogue on Arms Control (between the Chinese Scientist Group on Arms Control and the Committee on International Security and Arms Control of the U.S. National Academies of Sciences, Engineering, and Medicine), was initiated in 1988 and continues even today.

Of all the dialogues, two Track 1.5 dialogue mechanisms stood out as the most successful. These were the China-U.S. Dialogue on Strategic Nuclear Dynamics held in Beijing (the Beijing dialogue) and the U.S.-China Strategic Dialogue in Hawaii (the Hawaiian dialogue). These were terminated formally in March 2020 by the Defense Threat Reduction Agency (DTRA), their primary sponsor on the U.S. side.

The two dialogues convened across almost the same time span, with the Beijing dialogue meeting 11 times between 2004 and 2017 and the Hawaii dialogue also meeting 11 times between 2005 and 2019. The former started as biannual events and upgraded to an annual 1.5 mechanism in 2009. With its senior participation, large scale, and substantive and timely subject matter, it served as the main channel of discourse on nuclear and other strategic issues between the two countries.

The Hawaiian dialogue served as a valuable supplement to the Beijing one. The participation somewhat overlapped, but with a larger percentage of experts and academics, greater emphasis on conceptual discussion, issue-specific analysis, and even scenario development exercises.

² *The Cox Report: The Report of the House Select Committee on U.S. National Security and Military Commercial Concerns with the People's Republic of China* (1999).

Participants took part in their private capacities and represented neither their government nor the organizations with which they were affiliated. All events were closed door (meaning off the record and not open to the media) with a brief news release that was mutually agreed upon. The U.S. organizers published brief summaries of the dialogues on their respective websites.

From a Chinese perspective, these two dialogues were successful and fruitful. They benefited from senior participation and broad topical coverage. They were successful and fruitful in the sense that they helped to build consensus and deepen their understanding. They were a valuable learning experience.

The Main Phases

Looking back, we can distinguish three phases of the dialogues.

The Exploring Phase

Both dialogues started with limited participation and restrictive subjects. These constraints lasted for the first few years. The Beijing Dialogue was first held in April 2004 with 29 participants. Formal written papers were requested and presented, followed by question and answer sessions. The first Hawaiian dialogue in 2005 had the same meeting format. The participating experts and academics exchanged ideas by discussing written papers, became acquainted through various formal and informal interactions, and thereby lay the foundation for what turned out to be a long-running conversation on important and sensitive subjects.

The Thriving Phase

A marked change occurred in 2009. The two dialogues entered their golden times and thrived.

This change was a natural result of changes in the political context. Against the backdrop of a global movement for a nuclear weapon-free world, President Obama took over the White House. His administration supported the idea of a nuclear weapon-free world, engaged in active nuclear disarmament negotiations with Russia, then concluded the New START Treaty, and initiated a Nuclear Security Summit process at the United Nations. In early 2010, it released its Report of Nuclear Posture Review (NPR), which reduced the role of nuclear weapons in U.S. national security and restricted their employment. The level of attention paid to issues of concern to the Chinese side was encouraging to us. China–U.S. relations were stable and well managed during the Obama administration, as they had been in the preceding administration.

But there were nuclear topics to discuss, as had become clear by 2005 or so. Until that time, the nuclear factor had not become a central concern for the United States, nor a major issue in bilateral interactions, given the huge asymmetry between the Chinese and American nuclear arsenals. However, China's continuous strengthening of military power, including modernization of its nuclear arsenal, generated concern

and speculation in the U.S. security community. In 2006, at a summit with President Hu Jintao, President Bush suggested that the United States would like to invite General Jing Zhiyuan, the Commander of the Second Artillery Force, to visit and set up a dialogue with his U.S. counterpart, the commander of U.S. Strategic Command. In April 2008, partially in response to the repeated U.S. calls for such a dialogue, the Chinese National Defense Ministry and the U.S. DoD held an experts' seminar on nuclear issues at the Pentagon. An agreed upon follow-on session was postponed later that year in response to an arms sale decision to Taiwan by the Pentagon, as part of a general suspension of military-to-military exchanges. The momentum to institutionalize an official dialogue between the People's Liberation Army (PLA) Second Artillery Force and the U.S. Strategic Command never reappeared. However, the overall relationship remained stable and in 2013, Presidents Barack Obama and Xi Jinping met at Sunnylands and agreed to set up a "New Model of Major Power Relationship."

The requirements for in-depth and extensive exchanges on strategic issues grew on both sides, and the Beijing and Hawaiian Dialogues proved to be ready channels. With upgraded participation and broadened subjects, the two dialogues flourished from 2009 on.

The Beijing Dialogue was upgraded to a Track 1.5 status in 2009. The number of participants increased from less than 30 (in 2004) to over 80 people. The Chinese team was made up of active and retired officers of the PLA from the General Staff Headquarters, General Armaments Department, National Defense University, Academy of Military Science, and Second Artillery Force; diplomats from the Foreign Ministry; government officials from Ministry of Commerce; scientists from the China Academy of Engineering Physics and nuclear industries and enterprises; and academics from think tanks and universities. Such a mix virtually covered the whole spectrum of China's nuclear policy and research community, as well as nuclear weapons operating forces. Among the Chinese participants were general officers, ambassadors responsible for arms control and disarmament negotiations, top scientists evolved in weapon and policy development, and renowned scholars. The PLA Second Artillery Force (later the Rocket Force) began to join the dialogue since 2009, first as back-row observers and then as presenting participants.

The China Foundation of International and Strategic Studies, organizer of the Beijing Dialogue, also set up meetings for U.S. participants with high ranking PLA officers (Generals Xiong Guankai, Ma Xiaotian, and Sun Jianguo), and diplomats (Vice Minister of Foreign Affairs Dai Bingguo).

The American team upgraded greatly in seniority as well. The U.S. side came to include senior officials from the Departments of Defense, State, and Energy; the Joint Staff; former commanding (4-star) generals and admirals from Strategic and Pacific Commands; distinguished arms control negotiators with Russia; and experts from think tanks and universities.

In this phase, the topics for discussion were greatly broadened. Since 2009, the dialogue set up sessions covering almost all strategic and nuclear issues, including:

- Perspectives from both countries on global and regional security, assessment of security threats, and strategic objectives and approaches
- Global and regional nuclear postures and U.S.–Russia arms control and disarmament process
- Regional nuclear proliferation challenges such as North Korea, Iran, India, and Pakistan; and each other’s approaches to challenges and possible cooperation
- The threat of global nuclear terrorism, evaluation, and cooperation
- The possibility of setting up a multilateral disarmament mechanism
- Briefings on official documents such as DoD NPRs and MND’s Defense White Papers, as well as interpretation of each other’s nuclear policy/strategy, employment principles, deployment postures, and development strategies
- Discussion of PLA military reform and of U.S. strategy (e.g., the “Rebalance to the Asia-Pacific” and “Indo-Pacific Strategy”)

In addition, we had many exchanges of concern about strategic and military policies and capabilities. The Chinese side raised concerns about:

- U.S. missile defense systems and their deployment in East Asia and impact on China’s nuclear arsenal
- U.S. alliance consolidation in the Asia-Pacific region, the role of extended deterrence, and challenges to the credibility of China’s no-first-use (NFU) nuclear policy
- U.S. military support to Taiwan and the potential role of nuclear weapons in a cross Taiwan Strait military conflict
- Emerging technologies negating China’s nuclear deterrent [the Conventional Prompt Global Strike (CPGS)] as one of them
- Potential hidden agendas behind attempts to draw China into trilateral disarmament negotiations with the U.S. and Russia

The American side raised concerns about:

- The possibility that China might seek nuclear parity with, or even advantage over, the United States and Russia, as both reduce their arsenals while China’s increases
- China’s reluctance to participate in the nuclear disarmament process (understandable given the huge gap in nuclear arsenal size) and the U.S. desire that China declare a cap on the growth of its arsenal
- The credibility of NFU policy, given its erosion by a lack of details, content, and clarity about operational implementation, as well as the political space that exists for flexible interpretation

- China's lack of transparency on budget, deployment postures, and modernization programs; and on the composition, structure, and end state of China's nuclear arsenal
- China's integration of nuclear and conventional capabilities (核常兼备) and its implications for stability given increased difficulty for the United States in early warning, identification, interception, and second strike
- The nuclear relationship between China and the United States and the risks it perceives in accepting mutual vulnerability as the basis of that relationship, including domestic political risks
- China's reluctance to start an official strategic stability dialogue to discuss its nuclear relationship with the United States

In addition, the two discussed:

- The third-party factor in bilateral relations: U.S. allies, North Korea
- Military-to-military relations, confidence building measures (CBMs), and crisis management mechanisms
- Emerging technologies including missile defense, hypersonic weapons, space, cyber, artificial intelligence (AI) technologies and implication to global, regional and bilateral strategic relation/stability, as well as cooperation in international rule setting for military application of emerging technologies
- The concept of cross-domain deterrence was raised and discussed; we explored the idea of applying the NFU principle to emerging strategic domains such as cyber and space
- China-U.S. cooperation: global fight against nuclear terrorism, counter-proliferation, nuclear security, disarmament discussions in N-5 framework
- Specific and intensive discussions of terminology (revealing obvious or subtle differences in connotations, which sometimes complicated communications). Examples: deterrence, warfighting vs. deterrence approaches, extended deterrence, security dilemma, strategic stability (U.S. classic: nuclear arms race stability and crisis stability, Chinese more general military power balance), lean and effective integration of nuclear and conventional capabilities, self-defensive nuclear strategy

In this second phase there were also some very impressive presentations. From a Chinese perspective, two were especially memorable. One was an enlightening U.S. briefing on verification concepts and methods in the U.S.-Russian disarmament process. The other was a comprehensive and substantive Chinese briefing on the modernization of China's nuclear arsenal by Hu Side, China's top nuclear scientist.

The Declining Phase

The golden times ended in 2017 when the Trump administration took over the White House. The bilateral relationship went into free fall. Military interactions grew eventful. Almost all dialogues at the national and government agency levels halted. In such circumstances, it proved difficult to sustain the Beijing and Hawaiian dialogues. The 2018 Beijing dialogue was postponed by the Chinese side, on the argument that new U.S. sanctions against the PLA's Department of Armament Development and its top leader made it necessary. The Hawaiian Dialogue continued in April 2018 and June 2019. Then, both were formally terminated by the U.S. side in early 2020. The Chinese side was informed that the decision was based on the following rationale:

1. The Chinese organizer had not been responsive enough to repeated calls for holding a new round of dialogue (Beijing Dialogue) since 2017
2. The lack of transparency and expansion of Chinese nuclear arsenal necessitated a more formal Track 1 dialogue than the current Track 1.5 mechanisms
3. The failure of these dialogues to bring about an official dialogue
4. The decreasing level of senior participation from the Chinese side devalued both dialogues

In the rapid deterioration of China–U.S. relations and the greatly worsened political atmosphere, the Chinese side encountered additional difficulties. U.S. visas became more difficult to get. Several Chinese participants were harassed at U.S. airports. Those who gained entry faced new security restrictions. These experiences increased the concern of Chinese participants about their personal security and reduced their enthusiasm for continued participation.

As of September 2020, both sides have left the door open for the future resumption of these dialogues.

Consensus and Mutual Understanding

Conversations on strategic issues over a period of 16 years did yield some consensus and enhanced mutual understanding. A few examples:

- China's NFU policy has a philosophical and cultural foundation, which differs from the American and Russian nuclear thinking. Its approach is different, but its logic rational. The NFU policy has both a guiding and a binding effect on the size, development, deployment, and maintenance of the Chinese nuclear deterrent. After several rounds of dialogues, the U.S. team ceased to challenge the authenticity of China's NFU policy, even though it still has doubts about its credibility in extreme circumstances.

- The fact that the United States does not adopt an NFU strategy does not necessarily mean that it holds a first-use policy. The nuclear weapon's role in U.S. national security has been shrinking since the end of the Cold War and the nuclear weapon will be used only as a last resort and in extreme circumstances. The Obama administration failed to adopt a sole-purpose strategy due in part to the strong opposition from allies, who find assurance in current U.S. declaratory policy.
- Although the nuclear weapon has not been a big factor in defining the China–U.S. relationship, it's becoming more weighty, as China expands its arsenal and the bilateral relationship turns tense, competitive, and even confrontational. We may yet arrive at a time when the nuclear weapon gains a more or less defining nature in the relationship.
- Both China and the United States have to accept a certain degree of mutual vulnerability as the basis of their strategic military relationship. Assuming this to be so, the exploration of strategic stability should be discussed and pursued. However, China-U.S. strategic stability must be conceived differently from that in the Russia–U.S. relationship. The focus should be on mutual survival assurance and crisis prevention.
- China and the United States share extensive interests in the strategic arena: ensuring viable international arms control, disarmament and non-proliferation mechanisms, cooperating on regional nuclear proliferation challenges such as North Korea and Iran, countering nuclear terrorism, promoting nuclear security and peaceful uses of nuclear energy, regulating military uses of emerging technologies, and strengthening strategic stability in global, regional, and bilateral contexts.
- Official Track 1 dialogues on such strategic issues as nuclear weapons and cyber and space security are necessary for building trust and reducing misperception and misunderstanding, even though Track 1.5 dialogues can be important venues for interpreting official policies and exploring creative solutions.

Enduring Differences

- U.S. missile defense systems developed and deployed in East Asia prove to be an enduring Chinese concern, later in the context of the THAAD deployment in the Republic of Korea (ROK).
- Extended deterrence (that is, the U.S. policy of extending a nuclear umbrella over its allies) and the associated nuclear capabilities remain a focus of Chinese concern.
- An understanding emerged in early dialogues that the nuclear weapon would have little or no role in a conflict over Taiwan. However, the Trump NPR renewed Chinese concern, especially about the role in U.S. strategy of the “supplemental” low-yield nuclear weapons and their possible deployment in East Asia for “limited” conflict.

- Although both Chinese and American participants agree that complete denuclearization of the Korean peninsula serves their interest, they differ in approaches. The Chinese are strongly opposed to the use of force and are reluctant to rely on harsh sanctions.

A Learning and Trust Building Experience

The twin Beijing and Hawaii dialogues were a rare learning opportunity for all participants. We Chinese learned enough about classic American (Western) strategic terminology, while the American side learned enough about traditional Chinese thinking, to enable a substantially new and better form of communication. We came to understand each other. Moreover, the discourse grew smoother and the atmosphere improved over time. The fact that the two dialogues have gathered almost the same group of people twice a year to discuss conceptual and policy issues on a continuous basis has also contributed to building personal trust and professional credibility. In our assessment, it also improved the quality of policy consultation to both governments.

A Review and Assessment from an American Perspective

Brad Roberts

Whenever asked to describe these dialogues, American participants regularly use words like fascinating, eye-opening, polite, frank, and “occasionally heated” to characterize the tone and “highly substantive” to characterize their content. This chapter addresses the substance of the dialogues. Toward that end, it examines the following main questions:

- Looking back over nearly two decades of dialogue, what were the main phases?
- Which topics proved enduring and which dropped off of our agendas?
- What did we learn about the strategic policies and thought of the other country?
- What did we learn about our own strategic policies and thought?
- Was the dialogue process a success? By what metrics?

Throughout this chapter I regularly use the words “we” and “our” to describe some activity or insight. It was my good fortune to be a participant in most of these meetings and, for a brief period, one of the co-organizers.³ This summary is drawn from both the project reports provided to the sponsor by the convening organizations and secondarily from private notes.⁴

What Were the Main Phases?

One way to describe the evolution of the process over 15 years would be to map it against developments in the external environment that had significant impacts on the agenda and discourse. These include, for example, the:

- 2006 summit between presidents Bush and Hu that resulted in an agreement to initiate an official nuclear dialogue⁵
- arrival in 2006 of China’s first defense white paper with some nuclear content⁶
- Obama administration’s 2010 Nuclear Posture Review with its emphasis on U.S.–PRC strategic stability⁷

3 The views expressed here are my personal views and should not be attributed to my employer or any other organization that has been affiliated with this process, including its sponsors.

4 The project reports are not available from any single source. Rather, they are available selectively from the convening organization in any particular year.

5 Oval Office remarks by President George W. Bush, together with President Hu Jintao (April 20, 2006).

6 *China’s National Defense in 2006*.

7 *Nuclear Posture Review Report, 2010*.

- 2011 “pivot” by the United States promising a re-balancing of U.S. military forces toward East Asia⁸
- 2013 Obama-Xi Sunnylands summit and the agreement to pursue a “new type major power relations”⁹
- Trump administration’s new approach to China set out in 2017 and 2018 emphasizing competition and the growing risks of confrontation¹⁰

To be sure, each of these external factors had an impact on the content of the discussions. But there were not many distinct phases in the dialogue. Instead, the dialogue passed through three main phases. The first was the familiarization phase during which key elements of each country’s nuclear strategy were explained and discussed so that both the policies and the underlying strategic logic and considerations became clear. In this phase we also spent significant effort on developing a more common vocabulary.

The second phase was both deeper and broader and might best be called the exploratory phase. It was deeper in that each side revealed more to the other about debates within each expert community about the strategic logic underpinning policy. It was broader in the sense that we took on new topics linked to, but outside of, the core issues of nuclear strategy. To help enable broader and deeper dialogue, we also experimented with techniques new to this dialogue, such as breakout sessions and tabletop exercises. There was also close coordination of the dialogue planning process with the DTRA analytical support activities, such that topics identified in the dialogue could be developed in the intervening period and new ideas could be brought to the subsequent meeting.¹¹

The third phase was marked by an erosion of forward momentum. This had something to do with the need to return regularly to core topics to incorporate new information and bring new participants up to speed. It also had something to do with an accumulation of grievances and a souring of the broader non-military relationship. The erosion of momentum was also somewhat issue specific, as we continued to make good progress exploring some topics while making no progress or even backsliding on others.

Recalling the Starting Point: Mutual “Demystification”

It is useful to recall the context in which the dialogue process was started in 2004. A decade earlier, China had joined the Nuclear Non-Proliferation Treaty (NPT), thus opening a door to nuclear dialogue focused on nonproliferation, disarmament, and

8 Phillip C. Saunders, *The Rebalance to Asia: U.S.-China Relations and Regional Security*, Strategic Forum (Washington, DC: National Defense University, 2013).

9 Jackie Calmes and Steve Lee Myers, “U.S. and China Move Closer on North Korea, but Not on Cyberespionage,” *New York Times* (June 8, 2013).

10 *National Security Strategy, 2017* and *National Defense Strategy, 2018*.

11 Some examples follow.

arms control. Two main bilateral processes took hold: one involving scientists and the other involving diplomats and technical experts from academia and think tanks.¹²

While these dialogues proved rewarding, there were also some false starts. The Departments of State and Energy also began to cooperate in 1994 to establish scientific interactions with China in support of U.S. arms control and nonproliferation policy, which resulted in the U.S.-China Lab-to-Lab Technical Exchange Program. This program conducted various exchanges from 1996 to 1998, before being terminated amidst allegations of Chinese spying lodged by the Cox Committee.¹³

A second false start came in 1997 with the summit of Presidents Clinton and Jiang, where they agreed to seek a “constructive strategic partnership” and to undertake a high-level nuclear dialogue as one step toward that end.¹⁴ In follow-up to that summit, China proved reluctant to conduct such a dialogue.

To help think through a pathway forward, a study group was formed in 1998 by the Council on Foreign Relations focused on China and nuclear weapons. Its 2000 report highlighted the mix of opportunities and challenges in the emerging U.S.-China nuclear relationship.¹⁵ It also recommended deeper dialogue. This reflected the positive experience of many U.S. experts in interacting with Chinese experts in forums such as the Council for Security Cooperation in the Asia-Pacific. It was clear that new thinking was being done in China on nuclear issues and China’s experts were finding their voice.

In 2002, Bates Gill, then at the Center for Strategic and International Studies (CSIS), convened in Beijing an informal roundtable on nuclear issues in the U.S.–China relationship, including deterrence. The roundtable was sufficiently rewarding that he and other participants began to advocate in Washington D.C. for a formal and routine dialogue process.

The George W. Bush administration proved receptive. It sought to develop “active agendas of cooperation” with China with a significant military-to-military component.¹⁶ It also sought to address the lack of transparency in the bilateral military relationship. As Secretary of Defense Rumsfeld argued: “Our goal from a military-to-military

12 The scientific community was convened by the U.S. National Academies of Sciences, Engineering, and Medicine, under the auspices of its Committee on International Security and Arms Control and its Chinese counterpart. The broader dialogue was convened by the Monterey (now Middlebury) Institute of International Studies with sponsorship of the Department of State.

13 Nancy Prindle, “The U.S. China Lab-to-Lab Technical Exchange Program,” *Nonproliferation Review* (Spring-Summer 1998), p111-118. See also *The Cox Report: The Report of the House Select Committee on U.S. National Security and Military Commercial Concerns with the People’s Republic of China* (1999) and Michael May et al., *The Cox Committee Report: An Assessment* (Stanford, CA: Stanford University’s Center for International Security and Cooperation, 1999).

14 Barton Gellman, “U.S. and China to Seek a ‘Strategic Partnership,’” *Washington Post* (April 30, 2018).

15 Robert Manning, Ronald Montaperto, and Brad Roberts, *China, Nuclear Weapons, and Arms Control* (New York: Council on Foreign Relations, 2000).

16 The term is from the *National Security Strategy, 2002*, p28. The purpose was to ensure that the relationships with Russia and China not become “routine and unproductive.”

standpoint is to try to demystify what is taking place, demystify us to them, and have them demystify them to us.”¹⁷

To demystify is to remove mystery or confusion. Rumsfeld’s original public use of the phrase “demystification” came on a visit to China in 2005.¹⁸ With his ambition in mind, the Department of Defense took on the role of funding a new dialogue with China focused on the nuclear relationship—one aimed at “mutual demystification.” And the Defense Threat Reduction Agency, with its focus on reducing the risks posed by weapons of mass destruction, stepped up to play the role of sponsor on behalf of the department.

Phase 1: Familiarization

The first few meetings of the two communities of experts focused primarily on explaining and understanding existing policies. There was a frequent need to recite national positions already well known to the group, and not exclusively on the Chinese side. We also spent a lot of time clarifying concepts and definitions. There was also some discussion of the opportunities and challenges noted above. The following main insights emerged:

Assessment of the security environment (as it bears on nuclear policy and posture)

- China’s focus at the time was almost entirely on the United States, which its leaders saw as seeking Absolute Security, defined as an escape from a relationship of mutual vulnerability with China in order to resume nuclear-backed coercion of China.
- In contrast, the United States was heavily focused on cooperative threat reduction with Russia and adjusting its strategic posture with an eye to negating the emerging deterrents of so-called “rogue states” arming themselves with weapons of mass destruction (WMD) and long-range delivery systems.
- The broad divergence of views was seen by China’s nuclear experts as a barrier to cooperation, with the important exception of nonproliferation.

Deterrence strategy and policy

- China’s experts began by challenging one of the first premises of the U.S. side: that the two countries are connected in a deterrence relationship. They rejected the notion of a relationship, arguing that China’s strategy is entirely self-defensive in character, coerces no state, and developed on its own logic, independent of the strategies or postures of others. They rejected the notion of deterrence as the core purpose of China’s strategy, arguing that it is better

17 Remarks delivered by Rumsfeld to the Shangri-La Dialogue of the International Institute for Strategic Studies, Shangri-La Hotel, Singapore (June 3, 2006). See also Ralph Cossa, “Demystifying China,” PacNet Newsletter No. 24, Pacific Forum CSIS, Honolulu, HI (June 5, 2006).

18 “Rumsfeld Takes China to Task,” *Denver Post* (October 19, 2005).

understood as a counter-deterrence strategy (by stripping away the credibility of an enemy's threat of nuclear attack, it negates the coercive value of deterrence signals). They explained the origins of China's no-first-use policy in the Mao era and the associated development of military doctrine to absorb the first blow and then counter-attack. Then, they further explained that Chinese nuclear force planning emphasizes "lean and effective" forces and that China's modernization program is designed to ensure "nuclear sufficiency" and "the minimum means of reprisal."¹⁹

- The U.S. side sketched out the ideas in the 2001 "new strategic framework" and Nuclear Posture Review, putting an emphasis on dissuasion rather than deterrence in the U.S.–PRC relationship, reiterating that missile defense "is not pointed at China," and arguing for projects to keep nuclear weapons in the background rather than allowing them to emerge as "the currency of power" in major power relations.²⁰

Strategic stability

- The U.S. side emphasized crisis and arms race stability and their enduring relevance. It also set out arguments about the stabilizing benefits of missile defenses.
- The Chinese side was reluctant to endorse concepts rooted in the Cold War. There were wide-ranging debates about how to define strategic stability and about whose actions are damaging stable strategic relations. The Chinese energetically argued that the combination of then-planned U.S. conventional prompt global strike and limited missile defense capabilities called into question the viability of China's deterrent posture, on the argument that the Chinese threat to employ its nuclear weapons might not be seen as credible by a United States confident in its strategic superiority. In contrast, they were untroubled by overwhelming U.S. nuclear supremacy, as they were confident in the credibility in U.S. eyes to retaliate if struck by nuclear weapons (even if not promptly). They pointed out that the official military dictionary of the People's Liberation Army defines parity as a circumstance in which mutual vulnerability exists (that is, in qualitative rather than quantitative terms). On arms races, they argued that the United States defeated the Soviet Union in part by drawing it into an arms race and that they (the Chinese) refuse to be so drawn. They are concerned, however, by action-reactions cycles that materially erode China's security.

19 Jeffrey Lewis, *The Minimum Means of Reprisal: China's Search for Security in the Nuclear Age* (Cambridge, MA: MIT Press, 2006).

20 Brad Roberts, *Operationalizing Dissuasion: Practicalities and Pitfalls* (Alexandria, VA: Institute for Defense Analyses, 2005).

Potential conflict pathways

In this opening phase, attention focused on the potential for armed hostilities over Taiwan. The potential for such conflicts to have a nuclear dimension was largely discounted, especially by the Chinese side.

- China's experts were reticent to engage in such discussion. They generally saw the burden of escalation as likely to fall on the United States and concluded it would be unlikely to cross the nuclear threshold because of the certainty of Chinese nuclear retaliation.
- Many on the U.S. side drew the conclusion that the risk of nuclear escalation in a Taiwan Strait scenario struck most Chinese experts as an uninteresting problem to think about.

Transparency

- The U.S. side expressed its concerns about China as the least transparent of the five nuclear-weapon-states (as codified in the Nuclear Non-Proliferation Treaty).
- The Chinese side pushed back with the arguments that (1) it was becoming more transparent with new nuclear content in its 2006 defense white paper and (2) the United States is not as transparent as China would prefer (as for example in failing to say how much missile defense will be “enough” or to answer the question whether the United States accepts mutual vulnerability with China as the basis of the strategic military relationship).
- The U.S. side made a case for confidence and security building measures, arguing that cooperative measures at the working level can generate confidence that, over time, flows up to more senior levels, thereby contributing to improved political relations.
- The Chinese side argued that building confidence is a top-down process and that cooperative activities at the working level in the absence of confidence at the leadership level may prove counterproductive. They cited as proof their experience with lab-to-lab cooperation in the 1990s, which culminated in the controversy over alleged Chinese espionage in U.S. nuclear weapons labs and the stinging rebuke in the form of the Cox Committee Report.

In this opening phase the dialogue surfaced other issues to which we periodically returned over the years. These included, for example, nonproliferation issues in North Korea, South Asia, and Iran; space as a domain of strategic military competition; dissuasion as a theme in U.S. strategy; and Japan as a state under the U.S. nuclear umbrella but with significant potential for an independent nuclear force.

Phase 2: Exploratory

Having broken a lot of interesting ground in Phase One, the dialogue got even more interesting in Phase Two, as it broadened and deepened and got to the internal debates behind the policies.

Assessment of the security environment

- The U.S.-centric view of China's security environment evident in Phase One gave way to a much more nuanced discussion of the regional context in which China makes its nuclear policy. This environment was described as "tense, complex, and highly uncertain." Among its complexities are emergent "nuclear triangles" (e.g., China–U.S.–Japan, China–India–Pakistan). Among its uncertainties are North Korea's nuclear future, Japan's response, and the U.S. response to both. On U.S. extended nuclear deterrence, China's experts elaborated more fully their basic ambivalence. On the one hand, U.S. extended deterrence has been seen by China's experts as helpful for keeping Japan from seeking nuclear weapons; on the other, they fear that U.S. protection may embolden Japan to re-assert itself against China's interests and that the U.S. nuclear umbrella may be turned against China.
- In contrast, the U.S. side described the debate in the United States about the George W. Bush administration's focus on the "axis of evil" (North Korea, Iraq, and Iran); "the nexus" of "rogue states," violent Islamist extremists, and weapons of mass destruction (WMD); and on a concert of major powers to combat those threats.

Deterrence strategy and policy

- China's internal debate about no-first-use erupted in front of us in 2008, as we learned of a high-level review of whether to retain, abandon, or conditionalize it in light of pressures on China's small force from developments in the U.S. strategic posture.²¹ We were told that Party leaders had concluded that whatever problems of credibility as might exist would have to be addressed first by qualitative improvements to China's forces, on the argument that large quantitative increases would be contrary to China's "peaceful rise." China's internal debate about how large a force might be required in the long run also played out in front of us, in the form of a debate about whether deterrence requires the ability to "rain thousands" of nuclear weapons onto the United States or only uncertainty about whether one might get through.²²

21 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), p51-78.

22 Joseph Kahn, "Chinese General Threatens Use of A-Bombs if U.S. Intrudes," *New York Times* (July 15, 2005). See also Wu Riqiang, "Certainty and Uncertainty: Nuclear Strategy with Chinese Characteristics," *Journal of Strategic Studies* 36, no. 4 (2013), p579-614 and Wu, "Living with Uncertainty: Modeling China's Nuclear Survivability," *International Security* 44, no. 4 (2020), p84-118.

- In comparison, the U.S. side explained more about the debates about missile defense, conventional prompt global strike, cross-domain deterrence, and about the place of China in those debates.²³ It also discussed U.S. reactions to the latest developments in China's deterrence posture.²⁴

Strategic stability

This particular topic deepened and expanded in various ways.

- We returned to the topic of mutual vulnerability. The Chinese side never stopped pressing for a clear statement of U.S. acceptance. But it came to understand the differences of view in the United States about whether and how to respond to China's question.
- The U.S. side explained its concern of some U.S. policymakers that Communist Party leadership, as opposed to military experts, might interpret such a statement as a sign of appeasement and thus be emboldened, in time of crisis, to act aggressively on the assumption that the United States would be deterred from responding. We also set out some arguments about strategic stability in a multipolar Asia.²⁵
- China's experts also came to understand the difference between tacit U.S. acceptance and explicit U.S. rejection in the form of initiatives to deny China the ability to put the United States at risk with its strategic nuclear forces.
- Some Chinese experts began to warm to the idea of embracing strategic stability as an organizing concept for action and dialogue, while also arguing that "a new type of strategic stability based on a new security concept should be established."²⁶
- The emerging cross-domain topic added complexity to this discussion, as the two sides set out largely similar concerns about the implications for crisis stability of intensified military competition in cyber space and outer space. On these topics it was particularly challenging to enlist participants with the necessary expertise, as the American experts who have thought about these matters in a U.S.–PRC context are not numerous.

Potential conflict pathways

23 Brad Roberts, *China-U.S. Nuclear Relations: What Relationship Best Serves U.S. Interests?* (Alexandria, VA: Institute for Defense Analyses, 2001).

24 M. Taylor Fravel and Evan S. Medeiros, "China's Search for Assured Retaliation: The Evolution of Chinese Nuclear Strategy and Force Structure," *International Security* 35, no. 2 (2010).

25 Brad Roberts, *Asia's Major Powers and the Emerging Challenges to Nuclear Stability Among Them* (Alexandria, VA: Institute for Defense Analyses, 2009).

26 Lu Yin, "Reflections on Strategic Stability," in Li and Zhao, eds., *Understanding Chinese Nuclear Thinking*, p130.

- The ongoing discussion of the potential roles of nuclear weapons in a war over Taiwan became more substantive, with a clarification of different perceptions of where the burden of escalation would fall (each believing it would fall on the other) and the consequences of nuclear first use. Especially revealing was a discussion of how perceptions of stake would influence the resolve to escalate (with each side believing that its more substantial stake would lend decisive credibility to its threats to escalate).²⁷
- The U.S. side expressed its concerns about China's war control strategy and especially the confidence it seems to convey in the ability to control and manage escalation.²⁸
- The Chinese side provided new insights into its thinking about the requirements of effective crisis management and the use of game theory to explore the potential dynamics of limited wars.

Transparency

- Following Hu Jintao's 2010 commitment to possible new arms control measures "when conditions are right," there was an evident wave of new work by China's experts exploring those possibilities and conditions and what might be appropriate to China's "peaceful rise." We spent time learning about the U.S.–Russian arms control negotiation process and about verification measures and technologies.
- Our work on possible confidence and security building measures (CSBMs) became much more specific and productive, leading to a catalogue of ideas, including some related to the regulation of competition in the cyber and space domains.²⁹ This aspect of the dialogue illustrated the depth of expertise in China on certain technical issues but also the apparent isolation of that expertise in very narrow groups.

In this phase, another important new topic came onto the agenda: nuclear security, defined as the safety and security of sensitive nuclear materials, technologies, and expertise as pursued aggressively on a global basis during the Obama administration. But it did not remain on our agenda as a regular topic because of the sensitivities associated with the high level of ongoing Track 1 activity.

27 Brad Roberts, "The Nuclear Dimension: How Likely? How Stable?" in Evan Medeiros, Michael D. Swaine, and Andrew Yang, eds., *Assessing the Threat: The Chinese Military and Taiwan Security* (Washington, DC: Carnegie Endowment for International Peace, 2007).

28 Fiona Cunningham and Taylor Fravel, "Dangerous Confidence? Chinese Views of Nuclear Escalation," *International Security* 44, no. 2 (2019), p61-109.

29 One spinoff of this effort was a Track 2 joint study by U.S. and Chinese experts. See Lewis Dunn, ed., *Building Toward a Stable and Cooperative Long-Term U.S.-China Strategic Relationship*, jointly published by the co-organizers (Pacific Forum CSIS, SAIC, and the China Arms Control and Disarmament Association) (December 31, 2012).

Phase 3: Erosion of Forward Momentum

The third phase was defined by the erosion of forward momentum. This erosion occurred incrementally and selectively (meaning that the dialogue continued to be productive, only less so on an issue-by-issue basis). External factors played a role, as the political relationship took a turn for the worse for multiple reasons. Factors internal to the dialogue played a role as well. Parts of the dialogue became repetitive—a logical consequence of having been engaged for so long a time and given the need to bring new participants up to speed. The erosion of forward momentum also had something to do with the fact that the dialogue had matured to the point where the core issues and often conflicting interests had been clearly defined. The dialogue was also marked by an accumulation of grievances and frustrations.

When did this phase start? Already at the five-year mark in the process, the limits of the process began to come into focus. By 2009, we had built a substantial catalogue of misperceptions that each country held of the other—and then discovered what appeared to be an absence of leadership interest in actually addressing those perceptions at the official level in a search for clarification and resolution. To the American side, it seemed that China’s leaders were more interested in harboring a grudge and getting political benefit by criticizing U.S. nuclear policy than in addressing problems in the strategic military relationship. The Chinese side was similarly disappointed by the failure of the United States to embrace no-first-use or otherwise shift its nuclear policies or strategic thought in light of the concerns they had expressed. At the 10-year mark, the larger shift toward increased competition in the bilateral relationship was clearly evident. In 2015, the American side pointed to “the closing window of opportunity” for the dialogue to make an impact on leadership decisions. In 2016, we spoke about the “inflection point” in the bilateral relationship now in evidence.

Assessment of the security environment

- With growing frequency, Chinese experts characterized the U.S. government’s attitude toward China as offensive, “and increasingly so.” They dismissed American arguments that the U.S. military presence in the Indo-Pacific is benign and in China’s interest in a stable regional environment. U.S. extended deterrence was described as a strategy for “molesting” China’s interests. Echoing Xi Jinping, Asia was described as a place “for Asians.” A few Chinese experts expressed agreement with the common Russian view that the United States has too much confidence and security.

Deterrence strategy and policy

- The missile defense topic re-emerged as a high political priority for the Chinese side, with China's official talking points directly echoing the virulent attacks of Russian President Putin. China too had come to fear that the U.S. missile defense project was part of a broader U.S. strategy to encircle and contain China, in part by deepening the operational integration of America's regional alliances. Especially after the election of Donald Trump, Chinese experts began to question the long-term predictability of U.S. strategy toward China and especially of U.S. nuclear policy.

Strategic stability

- Chinese experts returned to regular complaints about the supposed U.S. search for Absolute Security. Some argued that China's refusal to respond to the U.S. invitation to strategic stability dialogue should be blamed on the Obama administration's failure to offer a precise definition of strategic stability.
- It also became clear that the Party had rejected the apparently unanimous advice of the expert community to accept the U.S. invitation. Their convergence on this point seemed to reflect different ideas about the value of such dialogue, with some experts interested primarily in understanding and reducing nuclear risks and others interested primarily in another rhetorical tool for condemning unwelcome developments in the U.S. strategic posture.

Potential conflict pathways

- Dialogue shifted to conflict in the Gray Zone, in a manner that did nothing to deepen understanding of shared risks. A substantive discussion of China's anti-access, area-denial strategy and of America's AirSea Battle concept helped reveal the emerging challenges at the interface of conventional and strategic warfare.

Transparency

- In this new phase, little new ground was broken. Whenever arms control was discussed the Chinese presented arguments unchanged since they were first made back in the 1990s. China's experts see the responsibility to reduce arms as falling squarely on those two powers which still have 95 percent of the global total. They understand arms control to be a process involving adversaries locked in Cold War-like strategic competition—a competition they refuse to join. Action-reaction cycles may become a problem, they argue, but China won't be tricked into an arms race by the United States.
- They see the burden of transparency as falling on the stronger power, on the argument that the weaker power is the more vulnerable to hidden intentions

and capabilities. They see the responsibility to dispel uncertainties in the bilateral relationship as falling on the state that is generating them (that is, the United States).

- They argue further that China's build-up of nuclear and missile forces and newly dominant regional posture do nothing to call into question China's rejection of new forms of transparency and restraint. "China isn't ready," they argue.

In this phase too, some new topics were brought onto the agenda, including the dangers of entrenched strategic competition and the implications of developments in China's nuclear forces. The U.S. side raised concerns about the co-location of nuclear and non-nuclear missiles and was told that those concerns reinforced China's confidence in its decision to co-locate missiles.³⁰ The U.S. side asked about the command-and-control challenges of taking part in the Chinese deterrent to sea and about the potential strategic role of the PLA Air Force but gained little insight of substance.

One other topic came onto the agenda in this phase, albeit informally: the linkage between Tracks 1 and 1.5 and the questions of whether and when an official dialogue might be initiated. This topic was introduced at the 10-year mark. By 2013, the Obama administration had waited for two years for a response to its invitation to a high-level, sustained, and substantive dialogue on strategic stability. Mindful of the three false starts on official dialogues following high-level agreements in 1991, 1996, and 2006, the administration continued to press China for a Track 1 dialogue while also supporting Track 1.5. But it began to signal that it was not prepared to accept the status quo dialogue process forever because it did not see 1.5 as a substitute for 1.

The Trump administration inherited the 1.5 process and also signaled its desire for an official nuclear dialogue. Then, in 2019, the Defense Threat Reduction Agency (DTRA) ended its support for the dialogue. Interagency discussion revealed broad frustration with the process as well as a diversity of views about whether and how to proceed. Multiple factors contributed to the decision. Prominent among them was the loss of forward momentum and the apparent declining value of new policy insights generated by each event, China's refusal to agree to Track 1 dialogue, and an assessment that the United States needed to make good on its threats to terminate Track 1.5 rather than accept it as a permanent alternative to Track 1. Contributing factors were the declining participation of senior and relevant Chinese military officers, the growing difficulties for the Chinese side in gaining approval to convene in Beijing, and a desire at DTRA to put scarce resources to work on other regional dialogues among U.S. allies and partners. The Trump administration then began its campaign to pressure China to join the formal arms control process with Russia.

In autumn 2020, the future of the dialogue is uncertain. Some in Washington D.C. expect it to be resumed in 2021. Others believe it has run its course and can only resume

30 Zhao Tong and Li Bin, "The Underappreciated Risks of Entanglement: A Chinese Perspective," in James Acton, ed., *Entanglement: Russian and Chinese Perspectives on Non-Nuclear Weapons and Nuclear Risks* (Washington, DC: Carnegie Endowment for International Peace, 2017).

when and if something fundamental improves in the political relationship. Still others believe that it will be turned back on as soon as China agrees to Track 1 dialogue.

What Did We Learn About China?

What did the U.S. side learn about China's nuclear strategy and strategic thought? The topical summaries above provide a partial answer. This section sets out some cross-cutting insights.

First, we learned that China's nuclear strategy is much more than a few platitudes offered by the Foreign Ministry about no-first-use and minimum deterrence. This is a common caricature among Americans who have devoted little attention to China. China's nuclear strategy is a product of careful deliberation and periodic reevaluation as the security environment and China's defense strategy evolve. Its internal logic is coherent and well developed. Moreover, China has invested in the needed intellectual capital to be a serious and, in its view, responsible nuclear-weapon state. China's leadership is engaged episodically in key policy debates and has regularly affirmed and updated this strategy. As a result, China's experts see this strategy as deeply ingrained and thus likely to continue for the long term.

Second, China designed and built a nuclear force consistent with the no-first-use principle. For China to strike another major nuclear power preemptively would be highly risky because its small residual force would be highly vulnerable to retaliation, which would then leave China incapable of deterring further attack on itself. Moreover, it has refrained from the "sprint to parity" that concerned Secretary Rumsfeld and other U.S. policymakers nearly 20 years ago.³¹ But it has modernized and diversified its nuclear forces. In doing so, it has built a force increasingly capable of limited use, flexible options, and escalation control. That modernization continues and apparently at an accelerating rate. The dialogue has not helped to settle the U.S. debate about the future of China's nuclear posture and strategy—along with the fit of traditional Chinese approaches with the "world class military" it seeks as part of "the great rejuvenation of the Chinese nation."

Third, the internal logic of China's nuclear strategy is under sustained and growing pressure. This is a result largely due to developments in China's security environment. One key factor is the greater complexity of that environment, with the "nuclear triangles" including South Asia and Northeast Asia exerting pressure—along with the U.S. extended deterrent and Russia's military modernization in the region. Other factors include assessments that (1) U.S. capabilities are being developed in a manner intended to escape a relationship of mutual vulnerability with China and that (2) American intentions are to encircle and contain China in order to bring a pro-democracy color revolution aimed at overthrowing the Chinese Communist Party. In this context, China's leaders are highly motivated not to lose their ability to credibly

31 Secretary Rumsfeld's remarks came in a Senate Foreign Relations Committee hearing considering the ratification of the Strategic Offensive Reductions Treaty in 2002, in which he argued that the treaty limits were sufficient to ensure the United States would have the means to disincentivize a possible sprint to parity by China.

threaten to retaliate if struck, as this remains essential, as Mao argued, “to smash nuclear bullying.”³²

External factors are not the only source of pressure on that internal logic. Clearly there is a rising discussion in China about what nuclear posture is consistent with its future as elaborated in Xi’s China Dream. Party leaders seem newly engaged in such discussions and to be testing ideas about “how much is enough?” that fall outside the traditional mainstream. Some Chinese academics and pundits have argued that a much larger force is necessary and that the traditions that have informed China’s nuclear strategy until now were better suited to China’s past than to its future. An additional source of pressure comes from the simple fact that China’s improving nuclear forces are becoming more capable than required for minimum deterrence. The U.S. government sees a purposeful shift in Chinese nuclear strategy to launch-on-warning.³³ The accelerating build-up of China’s nuclear force calls into question whether the modernization logic set out in the exploratory phase, emphasizing quality over quantity, continues to guide Chinese force planning.

Fourth, like their American counterparts, China’s experts think much more about how to make deterrence work than what to do if it fails. For most Chinese, the answer is simply “China will counter-attack and re-attack until you Americans stop shooting nuclear weapons at us.” Accordingly, they are generally less concerned than their American counterparts about crisis instability and the risks of escalation, both intentional and as a result of miscalculation. This too may be changing.

Fifth, China is highly unlikely to join nuclear arms control any time soon. China’s opposition is deeply ingrained. It begins with an understanding of the value to China of a credible nuclear deterrent in terms of being able to stand up to nuclear bullying. It includes an assessment of the value to the United States of arms control as a tool for constraining its adversaries. It is reinforced by the notion that the United States seeks to trick China into an arms race with the ambition of prevailing in long-term strategic competition. In addition, it sees arms control as an instrument for determining a quantitative balance when it’s the qualitative relationship that matters to China. But this does not imply that China will never take on arms control obligations. It sees itself as a responsible nuclear state that exercises restraint and has not given into the temptations of nuclear supremacy and bullying. It also doesn’t want to be embarrassed as an outlier when and if the other four permanent members of the U.N. Security Council can find agreement on something. But it is likely to join a formal arms control process only if and when much deeper reductions are accomplished by the United States and Russia—as well as when it has become much more comfortable that transparency measures will not jeopardize the security of its nuclear forces.

32 Cited in Yao Yunzhu, “Chinese Nuclear Policy,” in Christopher P. Twomey, *Perspectives on Sino-American Strategic Nuclear Issues* (NY: Palgrave MacMillan, 2008), p114.

33 *Military and Security Developments Involving the People’s Republic of China, 2020*, Annual Report to Congress, Office of the Secretary of Defense (2020), p88.

Chinese experts see U.S. efforts to pressure them to join arms control as certain to be counterproductive.

Sixth, U.S. deterrence messages seem to be well heard, as are messages about strategic competition. But this is not so for its assurance messages. Indeed, U.S. assurances that “missile defense is not pointed at China” are widely dismissed by China’s as not credible. Their weakness, according to Chinese analysts, follows from the failure to understand China’s nuclear strategy. In stating that the defense of the American homeland from missile attack is not intended to negate the large-scale strikes of which Russia and China are capable, the analysts argue that U.S. officials fail to understand that China plans no large-scale strikes. Rather, the credibility of its no-first-use strategy depends on its ability to conduct small-scale strikes with the few forces left to it following a preemptive strike. Thus, they argue, the American missile defense project erodes the core of their deterrence strategy, especially in combination with non-nuclear long-range strike systems. The analysts argue further that the assurance simply doesn’t square with the U.S. refusal to formally accept mutual vulnerability.

Seventh, there is sometimes a gap between experts and decisionmakers in China, just as in the United States. The experts are sometimes unsympathetic to the worst-case thinking of their leaders. By 2018 it was also clear that the advice of the expert community on the value of Track 1 dialogue was falling on deaf ears in Beijing. Like their American counterparts, they sometimes struggle with how much to ensure the “party line” is clearly understood and how much to convey their own opinion.

Eighth, China’s experts are well prepared to explain and defend Chinese nuclear policy. But 15 years ago, they were not well prepared for substantive and sustained strategic dialogue, in the sense that they had little knowledge of issues in the bilateral strategic military relationship and of the associated concepts and vocabulary. In the interim, the expert cadre has grown in numbers and sophistication, with many young people entering the discussion and many new institutions represented. This conveys a high level of commitment.

What Did We Learn About the U.S.?

In 15 years of trying to bring U.S. expertise to bear on this agenda, we also learned some important lessons about U.S. policy and strategic thought. The following points stand out.

First, in trying to explain U.S. policy, we found a great deal to draw on in the policies of the Bush, Obama, and Trump administrations. But the thinking behind those policies, as it related to China, often seemed underdeveloped, as those administrations generally did not put the U.S.–China strategic military relationship atop their list of priorities. U.S. nuclear policy remains heavily shaped by the relationship with Russia and U.S. missile defense policy remains heavily shaped by the relationship with North Korea. In the middle exploratory phase, forward momentum was driven in part by the fact that the time between meetings was used to generate

needed analysis and new content. The erosion of forward momentum had something to do with the failure to continue such efforts.

Second, U.S. policy has not been adaptive to insights gained in these meetings. So far, the United States has not adapted its assurance strategy in light of the findings noted above. If anything, it seems to be losing interest in assuring China about the validity of its promises of strategic restraint. Nor has it responded to China's question about whether the U.S. accepts mutual vulnerability as the basis of the strategic relationship with China. Nor has it defined an approach to arms control that might entice China to the table because it holds out the prospect of addressing some Chinese concerns.

Third, the U.S. side has not put the same priority as the Chinese side on growing the expertise needed for substantive and sustained strategic dialogue. Over the past 15 years it has replenished the pool of experts as individuals have retired or moved out of the field; but overall numbers have not grown. Moreover, the number of institutions, both governmental and non-governmental, with subject matter experts on these topics is largely unchanged from 20 years ago. The United States has not invested in these topics in a manner consistent with its expectation that this is the most important bilateral relationship of the 21st century.

Were These Dialogues a Success?

In launching the Track 1.5 process 15 years ago, there was no clearly defined set of objectives. “Mutual demystification” is an abstract concept. To be sure, the leaders of this effort had various ideas about what might be accomplished. But overall, the endeavor was largely exploratory and motivated by the desire to go find out what we could accomplish.

Surveying this record, from a U.S. perspective, we accomplished a great deal. We:

- learned the content and logic of China's nuclear strategy, and more about the key organizational voices that weigh in on it
- conveyed to China's experts the content and logic of U.S. nuclear strategy and strategic policy more broadly
- identified and countered misperceptions on both sides
- facilitated some convergence of thinking on various issues—and in finding common ground, avoided sending messages of appeasement
- reinforced U.S. messages on deterrence, assurance, and strategic competition
- informed U.S. policy development, in part by floating a few trial balloons
- informed policy development in China by enabling the experts to provide context to decisionmakers
- developed a bi-national Community of Interest with a shared vocabulary and habits of cooperation
- helped newly-appointed officials to rapidly climb the learning curve on these issues
- helped develop a successor generation of experts

But there were also some disappointments. We:

- failed to converge on a shared understanding of the risks to strategic stability and of cooperative measures to manage and reduce those risks
- failed to develop a shared vision of the future U.S.–PRC strategic military relationship that is realistic and positive
- failed to launch Track 1
- left on the table a rich menu of topics that could be explored to mutual benefit

Whether it is realistic to think that we might have accomplished these last four objectives is a matter of debate. But they are disappointments nonetheless.

Whether the benefits and disappointments were shared more or less equally by the two sides is an open question. Some U.S. experts see China as having gained more from the dialogue, including the ability to much more effectively criticize U.S. policy. Others see the “demystification” as mutually beneficial and a necessary foundation for future efforts to improve the relationship.

In my judgment, then, the dialogue process was a success. It delivered value on a sustained basis. Indeed, it exceeded expectations. It worked best when rotating between formal discussions in Beijing and informal discussions in Hawaii, when maintained at a steady pace, and when informed by tailored new analysis. Its most difficult moments were also some of its best, as we learned to discuss the core issues of interest dividing our two nations.

The Long View

The termination of the dialogue came at an especially unfortunate time. Some historical perspective is useful here. In 2004, the opportunities for U.S.-China nuclear cooperation seemed numerous and the challenges few. The basic trajectory of the U.S.–PRC bilateral relationship was troubled but seemed pointed toward long-term improvement. The long-term future of the nuclear relationship was uncertain but not overtly competitive. The Bush administration was pursuing a “strategy for stability” aimed in part at keeping nuclear weapons well in the background of the political relationship and at ensuring that they not become the main currency of the relationship.

In 2020, the challenges are numerous and the opportunities are few. The basic trajectory seems headed toward increased competition and conflict, with an increased risk of direct armed confrontation. The nuclear factor is rapidly gaining prominence in the United States and China’s actual capabilities and future intentions are now matters of significant concern to U.S. leadership. Despite disagreements about President Trump’s odd relationship with Xi Jinping, there is broad bipartisan support for a more competitive approach toward China. There is also broad bipartisan support for the effort to try to get China to the arms control table, along with broad recognition of the practical difficulties of doing so. By a growing number of U.S. experts and

policymakers, China is seen as a source of nuclear danger because of its apparent unwillingness to embrace transparency and restraint.

Relative to 2004, the strategic military relationship between the United States and China has grown much more complex. What used to be defined in straightforward nuclear terms has been complicated by the more prominent role of U.S. and allied missile defenses, by competition over hypersonic strike systems, and by competition in outer space. China's regional strike forces continue to grow while compensatory U.S. deployments have been constrained by the U.S. commitment to the treaty on Intermediate-range Nuclear Forces (INF) and its political legacy. China's leaders continue to argue that the United States is seeking Absolute Security, though they've now added the argument that the United States does so because it intends to bring a pro-democracy color revolution to China.³⁴ The PLA writes of the "continuous expansion" of China's national interests.³⁵

These developments raise a basic question about whether it is possible to effectively address the "rich menu" of topics needing discussion. In the new strategic context defined by acute competition and an absence of restraint, how can a dialogue focused on stability and mutual restraint be relevant and constructive? Some American critics of the 1.5 dialogue process have argued privately that it's time to move on. The focus on strategic stability made sense, they argue, for an era that has now passed. In today's more competitive world, they argue, the emphasis needs to shift from strategic stability to deterrence and from strategic restraint to long-term competition.

In this author's analysis, the shifting context only reinforces for both states the value of strategic stability as a way to manage and, where possible, reduce nuclear risk. Nuclear dialogue between the two countries, both official and unofficial, will be more difficult but even more valuable in the more troubled period that lies ahead.

³⁴ Kong Jun, "China and Russia to safeguard global strategic stability, promote peaceful development," *People's Daily* (June 10, 2019) and Willy Wo-Lap Lam, "Xi Jinping Warns Against the 'Black Swans' and 'Gray Rhinos' of a Possible Color Revolution," Jamestown Foundation (February 20, 2019).

³⁵ As discussed in *China Military Power: Modernizing a Force to Fight and Win* (Washington, DC: Defense Intelligence Agency, 2019).

Stabilizing U.S.–China Nuclear Relations Through Dialogue

Li Bin

In the last few months, the United States has repeatedly invited China to join its negotiation with Russia on the New START Treaty, apparently on the assumption that China is becoming a major nuclear rival. China has refused the invitation. In my view, China intends to show that it is not interested in a nuclear arms race similar to that between the United States and Soviet Union during the Cold War. It is very unfortunate that the two countries sent messages to each other by big diplomatic gestures rather than by more subtle nuclear dialogues.

It would have been more constructive if the strategic communities in the United States and China had had some discussions of these ideas before the United States extended the invitation. To illustrate my point, let me offer an example. Apparently, the counting rule of the New START Treaty cannot apply to China's nuclear force. The U.S. strategic community needs to explore some new counting rules and to explain how China could become part of the negotiation process under the new counting rules. But the U.S. strategic community does not seem to have a consensus on any innovative counting rules (questions about possible new counting rules have been raised several times at the press conferences of the U.S. Department of State, without generating an answer).³⁶

This episode illustrates the fact that the United States and China have entered into a very difficult period of time. There are two serious problems. The first problem is that there are a lot of strategic suspicions in the two countries. The second problem is that the bilateral nuclear dialogues needed to address these suspicions simply aren't happening. We need to re-double efforts to improve the atmosphere for setting up the dialogues and to carefully design the formats and topics of the dialogues.

The absence of dialogue has a lot to do with the fact that the overall U.S.–China relationship has been deteriorating quickly in recent years. In nuclear and related areas, the two sides have growing suspicions and worries about each other. Some of these have been discussed in the past Track 1.5 dialogues. Besides their traditional concerns on U.S. missile defense, Chinese nuclear experts worry that the U.S. deployment of low-yield nuclear warheads will lower the threshold of nuclear war and that the U.S. withdrawal from various international arms control agreements will

36 In a press conference with Ambassador Marshall Billingslea, U.S. Special Presidential Envoy for Arms Control, Daryl Kimball of *Arms Control Today* asked a question about the conceptual framework a multilateral arms control architecture would cover. Billingslea responded that he "won't be able to get into the details." In the same conference, Michael Gordon with the *Wall Street Journal* asked a similar question and Billingslea gave a similar answer. See "Press Briefing with Ambassador Marshall Billingslea, U.S. Special Presidential Envoy for Arms Control and Lt. Gen. Thomas Bussiere, Deputy Commander of the U.S. Strategic Command" (August 18, 2020). <https://translations.state.gov/2020/08/18/briefing-with-ambassador-marshall-billingslea-u-s-special-presidential-envoy-for-arms-control-and-lt-gen-thomas-bussiere-deputy-commander-of-the-u-s-strategic-command/>. Accessed November 6, 2020.

generate larger uncertainties about the future international nuclear order. It is my understanding that some American nuclear experts worry that China will significantly increase the size of its nuclear force. They also have concerns about the dual-use capabilities of some Chinese delivery systems.

The Track 1.5 dialogues of the past were helpful in reaching some agreements between the strategic communities of the two countries. At least, the dialogues promoted mutual understandings on the aforementioned issues. They could be helpful again. There are some emerging nuclear issues that need to be discussed together by Chinese and American nuclear experts.

The first issue is how the American strategic community looks at the value of nuclear arms control (broadly defined to include also nuclear disarmament and nuclear nonproliferation) in the new security environment. My assumption is that the views in the United States today are extremely diversified. I believe that cooperation in the past on arms control has served us well. China and the United States had good cooperation in the negotiations on the Comprehensive Test Ban Treaty and on the Joint Comprehensive Plan of Action. The preparation of these two measures significantly benefited from wide-ranging engagements of experts in our two countries through Track 1 and Track 2 dialogues.

A related issue is how the American strategic community looks at China's possible participation in New START-like negotiations. My view is that in the past, the American nuclear experts did not want China to be part of the negotiations because otherwise it would raise China's nuclear status. Instead, most American nuclear experts suddenly wanted China to explain its nuclear weapon development plan for the future and to assure the United States that it would not seek nuclear parity with the United States. It is not clear to Chinese experts how the Trump administration changed U.S. policy on this issue—or why it did so.

Future nuclear dialogues must also help the Chinese side understand the philosophical changes on nuclear arms control in the American strategic community. As the United States has a leading role internationally, major shifts in American arms control philosophies could dramatically alter the future nuclear order. It may also be that our American nuclear counterparts are similarly curious about possible philosophical changes in the Chinese strategic community. Some discussions on the philosophical issues are thus extremely necessary and potentially mutually beneficial.

Disruptive new technologies also require our attention. Some new technologies, such as space technology, cyber technology, artificial intelligence, missile defense, and supersonic vehicles are casting their shadows over the nuclear domain. These technologies and their applications may complicate traditional calculations on nuclear stability—and may already have done so. While the missile defense issue was often discussed in past dialogues, the other technologies have received little or no attention. Apparently, many countries and experts are anxious about the competition over these technologies due to their concerns on the first mover's advantages. They worry that they would fall behind farther and farther if others acquire the technologies

first. If the first-mover's advantages turn out not to be substantial, the competition would be unnecessary. At least some dialogue on emerging technologies would help to understand these anxieties and might also help to mitigate them.

As we consider the potential for future arms races, it is useful to recall that the nuclear arms race during the Cold War was not entirely about security. More than half of the race was about a competition for global leadership between the United States and Soviet Union. But strategic stability was seen primarily in quantitative terms. The focus on the comparison of the numbers of nuclear weapons in the arsenals of the two rivals proved somewhat misleading, as strategic stability proved to be not very sensitive to numbers. The United States and Soviet Union were very careful about the parity of their weapon numbers because they both wanted to be the world leaders. If security were their only major objective, they would not have worried as much as they did about the numbers. The United States accuses China of competing against the United States and its leadership role on both the global and regional stage. But this is not a fact. China does not have the intention to compete for the leading role in the world, and the United States has less interest in leading the world. It would be a mistake if the two countries were to compete with each other on this issue. China does not have a plan to develop nuclear parity with the United States or to use the influences of its nuclear weapons to gain leading roles regionally or globally. The nuclear arms race issue needs to be clarified.

I draw the conclusion that times may be difficult, but the potential value of a renewed nuclear dialogue is high. But obviously the atmosphere for such nuclear dialogues is now very bad. Visa access to the United States is not the only problem. There are some other problems, such as sanctions on the traditional participating organizations of the dialogues and harassment of individual participants at the U.S. border. These problems pose difficulties in arranging nuclear dialogues.

But we should work through those problems and resume our dialogues. Strategic nuclear dialogues are important and necessary to address suspicions and concerns. To facilitate the dialogues and benefit from them, we should consider the following points.

First, it is politically destructive to attack some dialogues. We need some political assurance to make sure and recognize that our nuclear dialogues are legal and mutually beneficial. This would create a positive atmosphere for facilitating the dialogues.

Second, we need to develop some consensus on the objectives of strategic nuclear dialogues. Transparency should not be the objective. It is a tool to reach stability. An appropriate objective could be asymmetrical strategic stability. Strategic stability means that there are no incentives to use nuclear weapons or to engage in a bilateral nuclear arms race. For the purpose of asymmetrical strategic stability, the United States could assure China that it does not intend to undermine China's nuclear retaliatory capability while China could assure the United States that it does not intend to seek quantitative nuclear parity with the United States. The selection of the

topics of nuclear dialogues could include (1) issues related to asymmetrical strategic stability and (2) nuclear nonproliferation.

Third, strategic nuclear dialogues may involve different partners at different levels. Both Track 1 and Track 2 dialogues are useful. Track 1 dialogues could be more policy-oriented. Track 2 dialogues could offer more flexibility for brainstorming. Track 1.5 dialogues may be used to absorb the benefits of the other two tracks. Track 1.5 dialogues may involve the diplomatic departments, the militaries, and nuclear weapon laboratories. It is important and constructive to encourage engagements at different levels and among different partners.

Fourth, in the dialogues, we need to explore ideas of nuclear arms control and disarmament that are different from Cold War thinking. One possible direction is to devalue nuclear weapons. If nuclear weapons are considered to be usable or considered to be major determinants of leadership roles, countries would have strong interests in keeping large numbers of these weapons. Therefore, we need to make an effort to reduce the roles of nuclear weapons and create conditions for nuclear disarmament.

The Future of the U.S.–China Nuclear-Strategic Relationship: An American Perspective

Lewis A. Dunn

The U.S.–China nuclear relationship, and for that matter the broader military-strategic relationship, is steadily sliding toward a future of deepening political-military competition and confrontation in a relationship of adversaries. Future intense military crises and even conflict, if not necessarily nuclear conflict, can no longer be excluded. Nearly two decades of semi-official as well as sporadic more official dialogue have done too little to prevent this ongoing slide. That outcome will undermine both countries' security interests and well-being. Both Beijing and Washington need to step back to look that adversarial future squarely in the eye and ask if that is where they want to be. If the answer is no, they need to take steps to check and then reverse today's slide. Assuming a leadership commitment to reverse this slide, establishing a renewed Track 1.5 dialogue that is closely linked to sustained and robust official engagement can make an important contribution to shaping a different future that would better serve both countries' interests.

Against this background, this short essay begins by positing four different futures for the U.S.–China nuclear-strategic relationship over the next decade. The first future is today's slide toward an adversarial relationship of intensified political-military competition and confrontation. To use a term from Herman Kahn and the Hudson Institute of the 1960s and 1970s, this future is the “surprise-free” future—meaning no one should be surprised if it comes to pass. This paper next sketches three alternatives to the basic surprise-free future: regulated competition but avoidance of crises and conflict, military crisis and future military conflict, and restored full cooperation. Some judgments about why the earlier dialogue had such limited impact are then set out. The paper then goes on to consider how a renewed but different U.S.–China 1.5 dialogue could be part of a broader process of strategic dialogue and engagement to help avoid a nuclear-strategic future of solidified adversarial confrontation.

Alternative Futures for the U.S.–China Nuclear-Strategic Relationship

The table on the following page summarizes the possible dimensions of both the posited surprise-free future of solidified adversarial confrontation between the United States and China—as well as those of the three posited alternatives. The key drivers already leading toward adversarial confrontation are highlighted, as are other possible drivers that could lead to one or another of the other outcomes. Whether these dimensions and drivers are the “right ones” as well as their relative priority can be debated. But taken together, they serve to depict the spectrum of possibilities for the future U.S.–China nuclear-strategic relationship.

Solidified Adversarial Confrontation. At the level of nuclear policies, programs, and deployments, this outcome is characterized by interacting China–U.S. nuclear

offense-defense breakouts. On the one hand, steady modernization of China's nuclear forces transforms its nuclear posture and policy in terms of numbers of weapons, deployments, early warning, and doctrine. On the other hand, U.S. missile defenses no longer are limited, while new technologies for long-range conventional strike grow. Intense peacetime posturing and probing at sea, in airspace, in outer space, and in cyber space becomes the norm, with a high risk of incidents and accidents. Both countries also invest heavily in "friend-building" both in the region and on a global level. Nonproliferation cooperation has eroded greatly, including vis-à-vis North Korea. Not least, there is a risk of intense U.S.–China crises and well as conflict, whether triggered by accident, intention, or the actions of third parties.

As summarized by the accompanying table, there are many possible drivers of solidified adversarial confrontation, from historic conflicting interests to the spillovers in the U.S.–China nuclear-strategic relationship of third-party actions and shocks. Of particular importance to the question at hand of the future of U.S.–China Track 1.5 nuclear-strategic dialogue, mutual perceptions, misperceptions, and uncertainties of many kinds stand out as well. Left unconstrained, the pursuit of new technological opportunities also would contribute to this surprise-free future.

Regulated Competition and Confrontation. In contrast to the preceding future, the U.S.–China nuclear-offense defense interaction is stabilized. China's deterrent retains credibility, while U.S. missile defenses and conventional strike options do not run free. Cyber/space probing and posturing are constrained, while there is a reciprocal dialing-down of regional posturing. There is renewed non-proliferation cooperation, including on key problem countries, as well as lessened political confrontation globally. Military crises, confrontation, and conflict are now seen as unlikely, in effect, once again a "wild card" in the relationship.

As for possible drivers, two very different but interrelated pathways could lead toward this future of regulated competition and confrontation. A realistic appraisal of the risks of adversarial competition could animate and explain this mutual shift. Both countries' leaders could put their weight behind reversing the slide to solidified adversarial confrontation, beginning first with revamping economic relations in a mutually acceptable way and then with the nuclear-strategic relationship. Once again, conflicting interests would be finessed, and the differences of ideology muted. Officials in both countries would do the hard conceptual and analytic thinking needed to devise approaches to address the complexities of regulating a multi-domain process of nuclear-strategic interaction. Perhaps more likely, as also suggested by the accompanying table, it may first take some type of major shock. That shock could range from a U.S.–China incident, accident, or crisis/confrontation to a third-party shock that demonstrated both the risks of confrontation and the need for cooperative responses.

Military Conflict. Outbreak of U.S.–China military conflict, with a risk of escalation toward the nuclear threshold, is a very different possible nuclear-strategic future. Within this future, the possibility of nuclear conflict would not be ruled out.

U.S.–China Nuclear-Strategic Futures: One View of the Possible Landscape Ahead

Future	Possible Dimensions	Possible Drivers
Solidified adversarial confrontation—the “surprise-free” future	<ul style="list-style-type: none"> • Interacting nuclear offense-defense breakouts (with revised policy, new deployments, enhanced capabilities) • Intensified mutual peacetime cyber/space probing/posturing • Mutually assertive positioning/posturing in Asia-Pacific seas • High risk of incidents/accidents—air/sea/space/cyber • High investment in political-military-economic “friend building” in and outside of Asia • Non-proliferation cooperation eroded; more confrontations • Heightened risk of intense crises and conflict—by accident, intention, triggered by actions of third parties 	<ul style="list-style-type: none"> • Context: intensified economic confrontation • Heightened salience of conflicting interests—Taiwan, DPRK, Asia-Pacific futures • Deep mutual distrust, including the failure of mutual reassurance • Heightened perceptions of irreconcilable ideological differences and inevitable conflict • Perceptions of leadership ambitions and leadership resolve • Domestic politics and political positioning • Mutual uncertainties/misperceptions about capabilities and intentions • Generational change within political-military communities • Pursuit of new technological opportunities—and resulting competitive dynamics • Spillovers from third party actions and shocks—direct, indirect
Regulated competition and confrontation	<ul style="list-style-type: none"> • Nuclear offense-defense stabilized by mutual decisions at higher plateau—mutual vulnerability • Cyber/space probing/posturing capabilities in being versus actively demonstrated/tested; agreements on “not-to-do” actions • Reciprocal dialing-down of regional posturing—few military incidents/accidents; no new South China Sea “islands” • More limited “friend building” globally—and more cooperation in multilateral institutions • Renewed non-proliferation cooperation to stabilize outstanding challenges • Crises, confrontation, conflict now a “wild card” 	<ul style="list-style-type: none"> • Context: Economic “détente”—mutually acceptable recrafting of economic relationship • Leadership realism • Conflicting interests finessed • Perception of ideological clash muted • Bureaucratic/analytic/conceptual rethinking, mutual learning, reduced misperceptions and uncertainties • Economic, financial, and post-pandemic interests • U.S./China military (including nuclear, space, cyber) shock—accident, incident, or “whoops;” confrontation/crisis but resolved quickly • Third party shock impacting perceptions and interests—proliferation breakout, nuclear accident, incident, use
Military conflict	<ul style="list-style-type: none"> • Outbreak of U.S.-China conventional military conflict • Conflict escalation—across multiple domains, toward the nuclear threshold • Nuclear threshold crossed 	<ul style="list-style-type: none"> • Leadership gambles • Military over-confidence, over-jealousness • Missteps in escalating conventional confrontation-clash • Misperceptions, miscalculations, and misinterpretations of actions—own, adversary • Stunted crisis communication means and practices • Third party shocks and adventurism • Accidents and false alarms • Third party catalytic actions
Restored cooperation	<ul style="list-style-type: none"> • Military crises, confrontations, conflict now unthinkable • Nuclear and military planning no longer focuses on each other • Cooperation/joint action on regional-global issues • Cooperation on global governance issues, e.g, space/cyber, climate, sea resources • Continued limited “friend building” • Strengthened non-proliferation cooperation—resolving key outstanding challenges 	<ul style="list-style-type: none"> • Context: economic interdependence redux • Changes of leadership vision—including from leadership change • Recognition of shared global concerns—avoiding NPT breakdown, strengthening global norm against use of nuclear weapons, climate change • Shared interests take prominence over conflicting interests • Reduced perceptions of ideological confrontation and inevitable conflict • U.S.–China nuclear-military shock—conventional conflict, space-cyber-nuclear “whoops,” third party nuclear weapon use

Missteps, miscalculations, and misinterpretations on the part of leaders, officials, and militaries in either or both Beijing and Washington stand out as perhaps the most important possible driver of military conflict. Third party shocks also could be the initial trigger of an escalating crisis-confrontation-conflict, e.g., related to either Taiwan or North Korea. More “technical” dimensions that could contribute to escalation range from stunted crisis communications to possible nuclear, space, or cyber false alarms and accidents.

Restored Cooperation. Perhaps the most difficult future to envisage is that of restored cooperation, characterized by fundamental shifts away from how Washington and Beijing now view each other. Most fundamentally, each country would have stopped planning for military conflict with each other because a U.S.–China military crisis, confrontation, or conflict would have become unthinkable. Restored cooperation would be reflected in actions in addressing regional and global security and governance issues, including non-proliferation, climate, and space/cyber security.

A future of restored cooperation presupposes fundamental changes of leadership vision in both countries. One possible driver of such changes could be heightened evidence of the importance of restored U.S.–China cooperation to meet shared global concerns. For well-known reasons, the COVID-19 pandemic failed to bring about such a shift. But a future dramatic global climate event could do so. In turn, if sufficiently grave, a future U.S.–China nuclear-military shock could animate not simply efforts to regulate competition and confrontation but also to restore earlier levels of cooperation.

Revamping U.S.–China Track 1.5 Nuclear-Strategic Dialogue: Looking Back

The starting point for considering how possibly to revamp U.S.–China Track 1.5 nuclear-strategic dialogue with the goal of breaking and then reversing the slide into a future of solidified adversarial confrontation is to look back briefly at the earlier Track 1.5 dialogue. Based on personal involvement in many but far from all of those sessions, the following points help provide needed background for a look ahead.

The Earlier Track 1.5 Dialogue—What Worked Well?

Seen from one American’s perspective, the earlier dialogue worked in that it helped over time to:

- build trust between participants through both formal and informal engagement, though this trust-building element gradually lost steam
- provide a venue in which to extend the scope of U.S. engagement with Chinese officials, experts, and serving military
- respond to Chinese concerns about specific U.S. activities and seek to offer reassurance or resolve those concerns
- engage on difficult issues, putting forward proposals regarding how they might be handled and seeing how those proposals were met by Chinese colleagues

- gain selective insights regarding Chinese nuclear-strategic discussions, debates, posture, and thinking
- gain insights on Chinese perspectives on shared U.S.–China security problems, typified most by how to respond to the steady development of the nuclear-weapon posture of North Korea
- test out some potentially innovative approaches to collaborative engagement either to resolve uncertainties or to develop shared approaches (e.g., regarding the former on missile defenses or regarding the latter on North Korea’s nuclear weapon program)
- put forward new concepts for addressing the mutual uncertainties and lack of trust that were increasingly evident in the official relationship and that were already driving the slide to an increasingly adversarial nuclear-strategic relationship (e.g., a process of mutual strategic reassurance)

The Earlier Track 1.5 Dialogue—What Worked Less Well?

Again, seen from an American perspective, the earlier dialogue worked less well in that:

- while highlighting differences among American and Chinese participants, the dialogue did not prove effective in the beginning to identify options for resolving or at least lessening those differences (e.g., regarding Chinese calls for the United States to accept mutual vulnerability as a principle to govern the nuclear relationship or U.S. calls for greater Chinese transparency in the midst of ongoing modernization of its nuclear posture)
- despite the repeatedly expressed American belief that to be most effective, the Track 1.5 dialogue needed to be complemented by an official-level Track 1 dialogue—not simply did the Chinese side continue to say that the time was not ripe for official dialogue, but it never became clear to Americans why the time was not ripe or when it would become so for an official dialogue on nuclear-strategic issues
- limited innovative approaches such as parallel briefings by American and Chinese experts on specific topics (e.g., the impact of U.S. missile defenses on China’s nuclear deterrent were not followed up as they might have been with a joint U.S.-Chinese analysis of missile defense, for example)
- while effective in highlighting mutual uncertainties and areas requiring mutual reassurance, possible opportunities were missed by both countries to explore options to clarify mutual uncertainties and enhance mutual reassurance (e.g., reassurance measures related to U.S. deployment of THAAD in South Korea)
- the dialogue proved unable to build on and carry forward possible insights and areas of agreement from one meeting to the next rather than continuing to revisit and recycle issues, entreaties, and complaints

Revamping U.S.–China Track 1.5 Nuclear-Strategic Dialogue: Looking Ahead

In light of both the alternative futures for the U.S.–China nuclear-strategic relationship set out initially as well as the preceding look back at what worked well and less well in the earlier Track 1.5 dialogue, the following sketches one vision for a restored but revamped Track 1.5 dialogue within a more comprehensive process of U.S.-China dialogue and engagement. It considers vision, setting, purpose, balance, substance, and methods.

Leadership Vision—Avoiding Adversarial Confrontation. Leadership vision is the most critical starting point. To be successful, a revamped Track 1.5 dialogue needs to be animated by a shared U.S.—China leadership vision. That vision should set out a mutually acceptable and desirable future both for the overall U.S.–China political-military-economic relationship and for its nuclear-strategic component. With special regard to that nuclear-strategic component, its core should be a presidential-level joint commitment to cooperative efforts (including both official and semi-official dialogue) to check and then reverse the slide to a future of solidified adversarial confrontation, much less to military conflict. That commitment would reflect a joint recognition that both countries bear responsibility for the slide toward the adversarial future, that both countries' interests would not be served by it, and that both countries need to cooperate to avoid that outcome. There are different ways that such a vision could be crafted and enunciated. A shared leadership vision would both serve as a mutual signal between Washington and Beijing and as “marching orders” for each country's bureaucracy. Absent such a leadership vision, the potential payoffs of a Track 1.5 dialogue—or for that matter, any sustained dialogue—would be greatly reduced.

Purpose—Checking and Reversing Today's Slide. The purpose of a revamped Track 1.5 dialogue should be made explicit at the start: to help check and then reverse the slide to a future of solidified adversarial confrontation—with all the risks it would entail for both the United States and China. Agreement on that purpose then would help shape the how and what of the ensuing dialogue. In particular, it would focus attention on mutual exploration of the dimensions and drivers of that outcome, as well as options to address them.

Setting—Track 1.5 within a Broader Context of Dialogue. In addition to being “seated” within a leadership vision of a less conflictual, more cooperative U.S.–China nuclear-strategic relationship, revamped Track 1.5 dialogue should be explicitly “seated” within a broader context of multiple U.S.–China dialogues. Those other dialogues include an official-level nuclear-strategic dialogue, high-level military-to-military dialogues, and the ongoing dialogue in the so-called P5 process involving China, France, the Russian Federation, the United Kingdom and the United States. The work plan of the Track 1.5 component would not be developed in isolation but in a back-and-forth interaction with these other dialogues.

Balance—Track 1.5 and Other Dialogues. From an American perspective, all these dialogues are necessary. All of them can contribute to achieving the purpose posited above. In some instances, it may be relatively clear that a given issue needs to

be discussed primarily in one or another venue. For example, discussing specific enhancements of crisis communication mechanisms between our two defense establishments/militaries to lessen the risk of an escalating incident fit in the defense/military-to-military dialogue. However, differences persist between the United States and China with regard to the “right” balance to strike especially between a Track 1.5 dialogue and Track 1 dialogue (and for that matter between a P5 dialogue and bilateral Track 1 dialogue).

One possible rule of thumb would be to use a Track 1.5 dialogue for initial exchanges of views, analysis, and exploration of options on issues, including but not limited to those issues that both countries agree are not yet ripe for Track 1 discussion. The Track 1.5 results then could be forwarded onward to the Track 1 dialogue. The Track 1 dialogue then would provide the enhanced credibility of an “official stamp” on assurances and information provided in the Track 1.5 dialogue, involve more in-depth or detailed official exchanges, and aim for agreement on specific actions or initiatives. (A similar rule of thumb could be used to balance a P5 and bilateral Track 1 dialogue.)

Substance, Scope, and Work Plan. The substantive agenda of a revamped Track 1.5 nuclear-strategic dialogue as part of a more comprehensive process of dialogue and engagement would again be mainly concerned with avoiding a scenario where a solidified adversarial confrontation develops between the U.S. and China. To that end, it could begin by focusing on how such a future could well come about along with options to prevent that outcome. Closely related, attention could focus on how such a scenario could break down into open military conflict—if not nuclear conflict—as well as again discuss options to prevent such conflict. In both cases, as needed, the question of why it is in the interests of both Washington and Beijing to find a different future could be explored.

Consistent with this broad agenda, the scope should include not only nuclear weapons but also those related strategic capabilities that are linked to (or impact) the U.S.–China nuclear relationship, such as missile defenses, conventional strike (including new technologies), space, cyber, and applications of artificial intelligence. As for more specific topic areas, there is a very comprehensive menu of issues from which to choose, including by way of example:

- the sources of today’s mutual distrust as well as the reasons for the failures of past assurances
- closely related, possible confidence-restoring steps that could be taken jointly, in parallel, or unilaterally—but also possible confidence-eroding steps to be avoided
- mutual uncertainties about each other’s nuclear-strategic plans, programs, and intentions, as well as options and actions to lessen those uncertainties
- pathways to an escalating conventional military crisis-confrontation-conflict, including mutual misperceptions, misconceptions, and miscalculations

- possible unilateral reassurance actions that either side could take with regard to its nuclear-strategic plans, programs, and intentions
- possible options and initiatives aimed at enhanced cooperative regulation of U.S.–China nuclear-strategic competition, aimed at making more likely a future of regulated competition and confrontation if restored cooperation proves elusive
- responses to the types of third-party shocks, actions, and responses that could be an important driver both of the overall intensification of adversarial relations and of a future crisis or conflict, typified here by those arising out of the triangular relationship among the United States, North Korea, and China

All of these topic areas, of course, cannot be addressed at once. U.S. and Chinese officials could also choose to pursue some of these topics directly in Track 1 dialogue or other dialogues. But taken together, they provide many building blocks for a robust longer-term Track 1.5 workplan. Such a workplan would provide greater focus to Track 1.5 dialogue and ultimately make it a conduit of options for official-level Track 1 dialogue and action.

Methods. A revamped Track 1.5 dialogue should learn from and take further some of the more innovative methods used in the earlier dialogue. In particular, more use could be made of gaming and simulations. The step from not only parallel analyses of selected issues to joint studies by a U.S. and a Chinese expert also holds promise.

A Concluding Thought

The most plausible, surprise-free U.S.–China nuclear-strategic future is a bleak one, an intensified slide toward solidified adversarial confrontation. That future will be one of great risks to both of our countries, not precluding outright conflict under the nuclear shadow. It also will undermine both countries' well-being, both directly in terms of resources better spent elsewhere and in terms of making it even harder to transcend today's economic confrontation to find a mutually-advantageous economic relationship.

That adversarial future still remains avoidable, though it is becoming ever-harder to do so. At the very least, both countries have an interest in seeking to regulate their competition and confrontation if they cannot escape from it. Doing so requires a judgment in both Washington and Beijing that trying to do so is necessary, possible, and worth the expenditure in political, intellectual, and personal capital. Assuming such a judgment is made, a revamped Track 1.5 U.S.–China nuclear-strategic dialogue along the lines proposed in this essay can make an important contribution to finding a more cooperative way forward.

Lessons Learned and Future Prospects

Brad Roberts

With the four preceding chapters as background reading, a dozen experts from each country gathered virtually on September 21-22, 2020 to take stock of what we had learned—and whether and how to move forward the bilateral nuclear dialogue. This closing chapter reviews key insights from the workshop. It also takes one further step. The workshop agenda focused on the past and the future—but left aside the present. But of course the present crowded into the discussion at every turn. Hence this chapter closes with an exploration of the present moment in the bilateral nuclear relationship—which stands out quite obviously as a major inflection point.

The Past

In surveying the past, our thinking largely converged. Both sides perceive three main phases in the dialogue process: an opening phase that clarified national policies and their supporting logic, a long middle phase marked by a broadening and deepening of dialogue, and a third phase marked by an erosion of forward momentum. We diverged, however, in explaining what accounted for the erosion of forward momentum in the third phase, with the Chinese side putting the emphasis on the combative approach of the Trump administration.

We assessed the benefits of dialogue in quite similar terms. The Chinese side put special emphasis on the value to its national leadership of having a body of expertise and experts to provide the context needed to make sense of developments in U.S. policy or posture.

The discussion of successes and failures generated a discussion of objectives and expectations. On objectives, the U.S. side explained that the process was initiated 15 years ago to explore what might be possible and relevant to the effort to demystify each other (as called for by Secretary Rumsfeld in 2006). More concrete U.S. objectives took shape as the process matured. On expectations, the Chinese side argued against letting the best become the enemy of the good. In their view, unofficial nuclear dialogue serves many valuable purposes, and we should not be disappointed if it falls short in some respects. They worry that a heretofore unrealistic U.S. aspiration for official nuclear dialogue has gotten in the way of the continued benefit flowing from Track 1.5, which they see as mutual.

Both sides also noted the professional and sometimes personal risks associated with participating in a cooperative activity, even if unofficial, at a time of increased political, economic, and military friction between our two countries.

The Future of Dialogue

In looking to the future, both expert communities see potential benefits in the renewal of a Track 1.5 dialogue. Both see a value in continued exchanges on nuclear policy and posture and in exchanges on associated topics bearing on nuclear stability. Both sides also see continued value in strategic stability as a focus of dialogue and organizing concept for the strategic military relationship, though the Chinese side amplified this with the argument that the focus should be on asymmetric strategic stability to account for the different postures. Both sides also agreed that simply re-starting the old dialogues after two years and the interim erosion of the political relationship would be difficult.

In addition, Chinese experts made a large number of suggestions for new activities or focus, including:

- new work on the management of political-military crises between the two countries, aimed at improving leadership awareness of potential crises and improving crisis management mechanisms
- toward that end, the use of tabletop exercises or scenario-based discussions
- more work on the impact of new technologies on strategic stability
- development of a case study on a future strategic relationship that is stable
- a joint prioritized list of opportunities to enhance cooperation for strategic stability
- joint analysis of specific problems in the bilateral strategic military relationship and the development of policy recommendations, leading to joint publications
- joint analysis of the potential roles of formal and informal arms control in the new strategic environment
- joint analysis of potential future treaty verification techniques and technologies
- more active development of next-generation experts and their integration into joint work

The U.S. side made many similar suggestions. Some members of the group also advocated for a more ambitious task: defining a positive but practical vision for the evolving bilateral strategic military relationship and, working backwards from that, defining the conditions that would need to be created to make it so.

But there were mixed views on the likelihood of renewing a Track 1.5 dialogue. U.S. experts could only speculate about the factors in America politics that might shape decisions in 2021 about whether and how to renew the dialogue. They underscored the importance of ensuring participation by the PLA, including the Rocket Force. PRC experts described myriad factors bearing on the capacity and willingness of their system to make further dialogue possible.

There were also mixed views on the likelihood of the initiation of Track 1 dialogue. Senior PRC experts described a new willingness in Beijing to talk with the United States “on any topic” but also continued opposition. One senior participant stated

that the Beijing think tank community has been tasked to recommend potential dialogue topics. But China's experts also questioned whether the basis exists for a bilateral dialogue focused on U.S. efforts to enlist China in the strategic arms control process, arguing that China is unwilling to join a process aimed at pressuring it to engage in forms of transparency and restraint it continues to reject. Experts from both countries were divided on the question of whether it is possible for official dialogue to get underway in the absence of a clear presidential commitment on both sides.

The Present Moment in the Strategic Military Relationship

For the September workshop, we did not compose a discussion focused on the present moment in the bilateral relationship. But of course it often came into discussion. This had something to do with the fact that we convened six weeks ahead of a U.S. presidential election that seemed likely to significantly impact the future trajectory of relations, one way or another.

The brevity of the discussion of the present moment is unfortunate because the strategic military relationship, like the broader bilateral relationship, is in deepening trouble. Indeed, it is at an inflection point. Understanding why and how may bring some needed clarity to the consideration of whether and how to resume nuclear dialogue.

First, there are significant new questions about whether the internal and external pressures on China's nuclear policy and strategy described so vividly to the American side over the last 15 years have culminated in a decision by China's leaders to choose a different nuclear course.

- What, after all, are we supposed to make of statements by President Xi in 2016 and 2017 promising to “achieve a great rise in strategic capabilities” and “breakthroughs . . . in strategic deterrence capability”?³⁷
- In this light, how should we interpret the 2015 defense white paper, which reported decisions aimed at various improvements to China's nuclear forces?³⁸
- What underlying logic explains the accelerating growth in the size of China's nuclear force subsequently predicted by the U.S. Defense Intelligence Agency?³⁹
- How can we reconcile these developments with the subsequent statement in China's 2019 defense white paper which states that China “keeps its nuclear capabilities at the minimum level required for national security?”⁴⁰
- These questions raise a broader question about who is driving the latest stage of Chinese nuclear force planning: the PLA or the Communist Party? If the latter, what nuclear posture might China's Communist Party leaders see as consistent

37 As discussed in *Military and Security Developments Involving the People's Republic of China, 2020*, U.S. Department of Defense, p55.

38 *Defense White Paper of China, 2015*.

39 *China Military Power: Modernizing a Force to Fight and Win* (Washington, DC: Defense Intelligence Agency, 2019).

40 *Defense White Paper of China, 2019*.

with the aspiration to become “a great modern, powerful socialist country” and “a leader in terms of composite national strength and national influence . . . at the center of the world stage” and in which it will have “the dominant position?”⁴¹

The U.S. government has also begun to raise questions about the extent to which the principles of minimum deterrence and no-first-use continue to guide Chinese force planning and operations despite their prominent places in China’s nuclear policy.⁴² China’s development of an early warning system and advanced command and control, as well as its continued investment in vulnerable silo-based forces, can be interpreted to signify that China has moved away from minimum deterrence and toward something more robust, including potentially a posture of launch on warning. These U.S. concerns are buttressed by the emphasis in China’s active defense strategy on “not waiting passively” for an enemy’s strike.⁴³

There are also new questions about whether and how the Rocket Force is accounted for in the new contingency planning processes of the PLA. Concept development in the PLA has focused on the possibility of an “anti-separatist” war over Taiwan with a conventionally superior, nuclear-armed United States.⁴⁴ One authoritative source describes this as “a large-scale, relatively high-intensity local war in the sea direction against the backdrop of nuclear deterrence.”⁴⁵

Second, the major uncertainties are not of course all on the Chinese side. From China’s perspective, there are the enduring and fundamental uncertainties about whether the United States can accept mutual vulnerability as the basis of the strategic military relationship and whether the United States would resort to nuclear weapons to reverse a failing defense of Taiwan. But there are also new uncertainties.

One was introduced with a change to U.S. missile defense policy in 2018. Through Congressional action, a single word was deleted from U.S. law on the word “limited.” Since 1999 and Congressional passage of the National Missile Defense Act, it has been U.S. national policy to “deploy as soon as is technologically possible an effective national missile defense system capable of defending the territory of the United States against limited ballistic missile attack, whether accidental, unauthorized, or deliberate.”⁴⁶ With deletion of any reference to “limited” defense, the Trump administration committed to “continuously strengthen and expand”

41 *Military and Security Developments Involving the People’s Republic of China, 2020*, Chapter One.

42 *Ibid.*, p85-89.

43 *Science of Military Strategy, 2005*.

44 Mark. R. Cozad, *Chinese Contingency Planning for Regional Hotspots*, testimony presented to the U.S.-China Economic and Security Review Commission (April 13, 2017).

45 *Science of Military Strategy, 2013*, p100.

46 Michaela Dodge, *The Backward Step on Missile Defense in the FY 2020 NDAA*, Information Series No. 455 (Fairfax, VA: National Institute for Public Policy, 2020).

missile defenses.⁴⁷ The president set “a simple goal”—“to destroy any missile launched against the United States, anywhere, anytime, anyplace.”⁴⁸ Chinese experts interpret this as jettisoning the assurance to China by a long string of presidential administrations (from Clinton to early Trump) that U.S. missile defenses are not intended to negate China’s strategic deterrent.

Another uncertainty is about the depth of the American commitment to engage China as a partner in the arms control process. The Trump administration’s effort to pressure China into joining the arms control process is understood by Chinese experts to have bipartisan support. There is a rising Chinese expectation of continued pressure whatever further developments take place in U.S. domestic politics.

Finally, from China’s perspective, there is a new uncertainty about the American appetite to precipitate an arms race with China. Attention has focused on the May 2020 statement by Special Presidential Envoy Marshall Billingslea that “We have a tried-and-true practice here. We know how to win these races. And we know how to spend the adversary into oblivion.”⁴⁹ Though Billingslea’s remarks might be dismissed as part of a momentary pressure campaign to join the arms control process, he spoke on behalf of an administration that clearly signaled in its National Security Strategy a commitment to pursue “overmatching” capabilities and dominance in a dozen strategic technologies.⁵⁰

These new uncertainties about developments in the nuclear postures and strategic mindset of China and the United States combine in a significant way to raise a fundamental question about the emerging trajectory of the strategic military relationship between the two. Just how competitive and dangerous might the unfolding strategic rivalry become?

How competitive might the rivalry become? One key metric is in the coupling of decisions each makes about the design of its military forces and strategic postures. Evidence today suggests that we’re in a phase shift: from loose to increased coupling. What does this mean? All countries develop military forces with an eye on the external environment in which they sit. But certain factors are pacing items that drive major decisions about needed military forces and their use. If two enemy states are locked in an arms race, decisions about the needed military forces and their use are driven by the desire not to lose ground because of the developments in enemy capabilities. Thus, decisions in the two states are likely to be tightly interconnected. This interconnectedness is called coupling. In other cases, states with difficult or ambiguous relationships but not conflictual ones do not compete to maintain or gain position,

47 *Missile Defense Review, 2019.*

48 “Remarks by President Trump and Vice President Pence Announcing the Missile Defense Review,” The White House (January 17, 2019).

49 Tim Morrison, *Transcript: Presidential Envoy Marshall Billingslea on the Future of Nuclear Arms Control*, Hudson Institute, Washington, DC (May 22, 2020).

50 *A New National Security Strategy for a New Era* (December 2017).

though they may well hedge against future negative developments. Thus, their decisions are loosely coupled, if at all.

For decades, decisions made in the United States and China about the design of their military forces, and especially their nuclear forces, were loosely coupled, if coupled at all. It is obvious today that developments in the strategic policies and postures of China and the United States are no longer separated. From China's end, some coupling has been evident over the last two decades, as China has deployed enough new nuclear strike capability to stay ahead of the combined effects of U.S. preemptive strike capabilities and missile defense capabilities. It did not sprint; it merely stayed ahead. Nor did it mirror President Putin in worst-casing the ultimate U.S. intention.

From the American end, China's impressions notwithstanding, little coupling has been evident over the last couple of decades. As a general matter for the first couple of decades after the Cold War, the United States took a *laissez-faire* attitude toward developments in China's strategic military posture and altered neither its nuclear modernization plans nor its homeland missile defense plans to account for Chinese actions. But China's sprint ahead in the conventional realm at the regional level, with rapid deployment of more than 1,000 intermediate-range ballistic missiles, has captured the attention of U.S. policymakers. It was a factor in the design of regional missile defenses in East Asia and in U.S. withdrawal from the INF Treaty (and relatively speaking, a less important factor than Russian non-compliance). America's next big debates about its strategic posture are likely to be about whether to pursue new nuclear capabilities to bolster its extended deterrent, the need for more robust missile defenses, and the potential deployment in numbers of hypersonic non-nuclear strike systems. China will be a central factor in those debates, just as speculation about America's next strategic choices are a factor in China's debates.

So, how competitive might strategic military rivalry become? Potentially, very much so. With the ongoing intensification of the action-reaction cycle, we may be well into the opening phase of an arms race that neither side seeks but that neither could comfortably sit out.

And how dangerous might the rivalry become? This is likely to prove to be a function of how both China and the United States cope with China's emergence as a mature nuclear weapon state and a quasi-peer to the United States in the nuclear realm.

This emergence as a mature nuclear power is well underway.⁵¹ In little more than a decade, with the deployment of its initial fleet of ballistic missile submarines, China's posture has evolved from a monad to a dyad. If reports prove valid, it is now well on its way to a triad, as it completes development of an air component. It operates that force with modern early warning and command-and-control systems. It also operates its force at higher readiness levels than before.

51 *Military and Security Developments Involving the People's Republic of China*, 2020, p85-89.

China's leaders appear to have no ambition to achieve quantitative nuclear parity with the United States. After all, they associate such parity with a Cold War-like adversarial nuclear relationship, which they continue to energetically reject. Moreover, in the Chinese way of thinking, parity exists when assured retaliation exists. Accordingly, it has built a force capable of assured retaliation and continues to grow that force to stay ahead of the growing U.S. missile defense. The latest DoD report indicates that the number of warheads notionally deliverable on the United States in a first strike by Chinese ICBMs will have increased to 200 by 2025 from approximately 20 in 1990.⁵²

As China becomes a mature nuclear power, it is becoming a quasi-peer to the United States. To be clear: it is not becoming a Russia-like peer with a nuclear force sized and operated in ways very similar to that of the United States. Nor is it becoming a near-peer with a nearly-as-good nuclear force. But it is becoming a quasi-peer—with a nuclear force that is resilient in the face of potential attack and capable of assured retaliation at a level and scale posing a significant threat to the United States, and with the apparent intent to use that force to safeguard China's interests at both the strategic and regional levels of war.

Both China and the United States will have to adjust to this new status. Will China become more assertive at the conventional level, confident in its ability to suppress escalatory responses by the United States because of the long shadow of nuclear weapons? Or might it become more ready to accept transparency and restraint as practiced by other mature nuclear powers and thus also to engage in arms control? For the United States, this raises the most fundamental questions. What does the United States want its strategic military relationship with China to become? Can it accept mutual vulnerability—and say so? Alternatively, is it willing and able to win an arms race with China? If it seeks negotiated restraint with China, what is it willing to trade away, if anything, to get what it wants? What are the interests of U.S. allies in how the U.S. answers these questions and how important are those interests to the United States?

This leads me to two simple conclusions: There is still plenty to talk about. And there is still plenty of homework for the United States to do in preparation for dialogue, both official and unofficial.

52 Ibid., p55.

Appendix: Workshop Participants

Justin Anderson, National Defense University
Linton Brooks, ambassador (retired)
Elaine Bunn, consultant
Ralph Cossa, Pacific Forum
Lewis Dunn, ambassador (retired)
Fan Jishe, Central Party School of the Communist Party of China
Brad Glosserman, Pacific Forum
Bob Girrier, Pacific Forum
Bob Gromoll, Department of State (retired)
Guo Xiaobing, China Institutes of Contemporary International Relations
Li Bin, Tsinghua University
Li Chijiang, China Arms Control and Disarmament Association
Liu Chong, China Institutes of Contemporary International Relations
Lu Yin, Senior Colonel, National Defense University
Anna Péczeli, CGSR (observer)
Brian Radzinsky, CGSR (observer)
Brad Roberts, CGSR
David Santoro, Pacific Forum
Philip Saunders, National Defense University
Sun Xiangli, China Academy of Engineering Physics
Ryan Swan, CGSR (observer)
Chris Twomey, Naval Postgraduate School
Brandon Williams, CGSR (observer)
Wu Jun, China Academy of Engineering Physics
Yao Yunzhu, Academy of Military Sciences (retired)
Zhang Tuosheng, China Foundation for International Strategic Studies
Zhang Yan, China Arms Control and Disarmament Association
Zhou Chang, China Arms Control and Disarmament Association

“ An extraordinary unofficial dialogue on nuclear deterrence between China and the United States flourished for 15 years before ending in 2019. Bringing together current and former government officials, military leaders, and think tank experts, this dialogue was substantive, frank, and wide-ranging. At this time of growing friction in the U.S.-China nuclear relationship, it is useful to take stock of lessons learned. This collection of essays by both American and Chinese authors does an admirable job of distilling key insights and pointing the way to the next needed dialogues, both unofficial and official. A must read by all current and future professionals involved in working the strategic relationship between China and the United States. ”

Cecil D. Haney

Admiral (retired), former Commander United States Strategic Command

“ The twin Beijing and Hawaii dialogues were a rare learning opportunity for all participants. We Chinese learned enough about classic American (Western) strategic terminology, while the American side learned enough about traditional Chinese thinking, to enable a substantially new and better form of communication. We came to understand each other. ”

Yao Yunzhu

Major General (retired), People's Liberation Army