



On the Value of Nuclear Dialogue with China

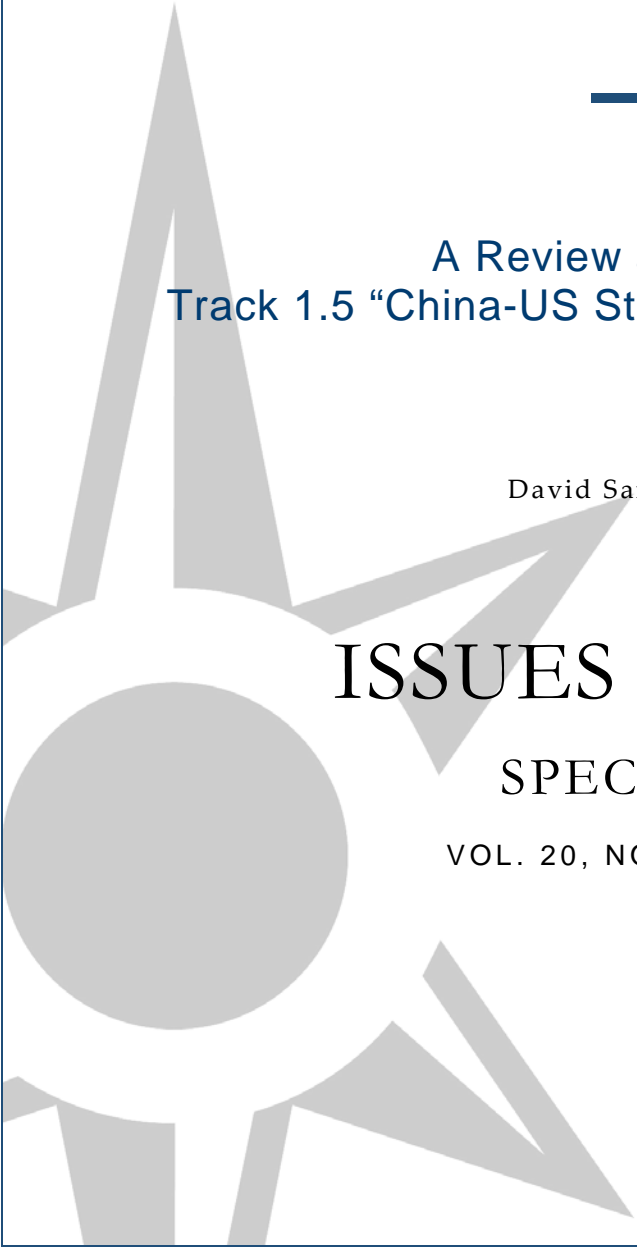
A Review and Assessment of the
Track 1.5 “China-US Strategic Nuclear Dynamics Dialogue”

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ISSUES & INSIGHTS

SPECIAL REPORT

VOL. 20, NO.1 | NOVEMBER 2020



Pacific Forum

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ACKNOWLEDGMENTS

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This paper was written by Dr. David Santoro, Vice President and Director for Nuclear Policy at the Pacific Forum, and Dr. Robert Gromoll, former Director of the Office of Regional Affairs at the US Department of State's Bureau of International Security and Nonproliferation; Dr. Gromoll is now retired. Both Drs. Santoro and Gromoll participated in numerous dialogue rounds, and Dr. Santoro was a co-organizer.

The paper is based primarily on the contents of the dialogue's written reports, several of which were authored or co-authored by Dr. Santoro. By and large, the paper draws directly from these reports and reviews how the topics addressed in the dialogue were approached and discussed by the US and Chinese sides over time. (A list of these reports is included at the end of the paper; some have been published, others have not.) The paper is also based on the authors' broader experience in participating in the Track-1.5 dialogue; the conversations they have had with US and Chinese participants on these issues over the years, both during the dialogue and on the margins; and their own personal research. This paper represents the views of the authors and not those of Pacific Forum or the US State Department.

INTRODUCTION

In view of the lack of knowledge about the nuclear dimension of the US-China strategic relationship and of the absence of interactions between US and Chinese officials on this dimension, the United States decided to sponsor unofficial discussions on these issues in the mid-2000s. Initiated in 2004, and billed as a Track-1.5 activity, the “China-US Strategic Nuclear Dynamics” Dialogue brought together US and Chinese think tank experts, retired officials and military leaders, as well as government officials and people in active military duty attending in their private capacity; occasionally, young scholars on both sides also participated.¹ Supported by the US departments of Defense and State, and funded almost entirely by the US Defense Threat Reduction Agency, this Track-1.5 dialogue was run by the Center for Strategic and International Studies in the first couple of years, and then by the Pacific Forum in collaboration with the Naval Postgraduate School and in close partnership with the China Foundation for International and Strategic Studies and the China Arms Control and Disarmament Association, two Chinese think tank affiliated with the People’s Liberation Army (PLA) and the Chinese Ministry of Foreign Affairs, respectively.

The Track-1.5 dialogue was premised on the assumption that it is crucial for the United

States to know what China wants, what its concerns are, and what they project for US-China strategic nuclear relations in the future. While these insights would not determine US policy toward China, the idea was that it was critical to know what Chinese priorities and goals were, what Chinese officials and experts wanted to discuss and what they did not want to discuss, and why. Another essential goal of the dialogue was to build a foundation for official, i.e., Track-1, dialogue to begin on these issues.

A decade and a half later, in 2019, and after biannual Track-1.5 dialogue rounds taking place alternatively in Beijing and Hawaii (in Honolulu or on Maui), the US side opted to suspend the dialogue.² The decision to suspend to do so was made not only because the Chinese side held firm on not making a transition from Track-1.5 to Track-1 dialogue (despite repeated US calls for such a move over several years), but also because of the Chinese side’s inability to hold the Track-1.5 dialogue rounds in Beijing 2018 and 2019, and because there was a marked decrease in the seniority of Chinese participants at the latest Hawaii dialogue sessions.

It is now good timing, then, to conduct a review of what the Track-1.5 dialogue achieved, and where it fell short of expectations. This paper provides an assessment of the dialogue series based on the observations and experiences of two long-time participants, as well as information provided by meetings reports compiled by

¹ There is often disagreement over the definition of Track-2 and Track-1.5 work. As a general rule, Track-2 involves unofficial engagement between academics and researchers from two or several countries. When government officials (e.g., diplomats, military officers, or officials from other bureaucracies) also attend in their private capacity, such engagement is called Track-1.5. Both Track-2 and Track-1.5 work are different from official government-to-government, i.e., Track-1, work.

Because US and Chinese officials attended the dialogue but participated in a private capacity, along with non-government subject matter experts, it qualifies as a Track-1.5 initiative.

² Note that the dialogue was titled the “China-US Strategic Nuclear Dynamics Dialogue” when it was held in Beijing and the “US-China Strategic Dialogue” when it was held in Hawaii. Also, on one occasion, in March 2017, the dialogue met in Washington, DC.

the Pacific Forum and Naval Postgraduate School, the two principle US convening organizations. It begins with a discussion about the structure and utility of the Track-1.5 dialogue before moving to examine the efforts to move to a Track-1 process. Next, the paper explains that, during the course of the Track-1.5 dialogue, the broader US-China strategic relationship changed considerably, with China gaining more power and influence in the world, and therefore more ability to assert itself vis-à-vis the United States, including on strategic nuclear issues. Finally, the paper reviews the key topics discussed by the two sides and explains how that discussion has evolved over time. It reviews the following topics: strategic stability, notably the concepts of mutual vulnerability and no-first use (NFU); ballistic missile defense (BMD); extended deterrence; escalation and crisis management; arms control; transparency; and nonproliferation. The paper closes with a short conclusion and prospects for the future.

STRUCTURE AND UTILITY OF THE TRACK-1.5 DIALOGUE

Discussions with the Chinese, once the participants became familiar with each other, were unusually frank and candid. In the earlier dialogues (mostly in the 2000s), at “first contact,” the Chinese came to meetings armed with stilted, pre-cooked talking points. This was especially true when Taiwan was at issue. Later in the dialogues, the back and forth on Taiwan became ritualistic: each side would say its piece, turn the page, and move on to the next topic having done its duty. No doubt this was because there was no new ground to cover and, fortunately, the Taiwan issue was in remission.

Since many of the participants on both sides became regulars in the dialogues, the two sides came to know and trust each other well enough to go beyond conference banter and have low-key side-bar discussions for further clarification and elaboration of points made in the full sessions. It took approximately 3-5 years to build such confidence; the US side found that the Chinese were increasingly willing to share that certain subjects were under review or being hotly debated in Beijing. Their specificity on such discussions ranged from indications that “research was being done” to revelations of full-blown policy debates and decisions at the highest levels.

Occasionally, after several iterations of towing the Party line, disagreements broke out within the Chinese delegations; it became a regular feature of the dialogue from the late 2000s. The Chinese, we learned, were not monolithic in their views and in time they were willing to question—if not contradict—one another. When they occurred, these instances offered US delegations valuable insight into different strains of Chinese strategic thinking.

The dialogues were, for the most part, immune from tensions in broader US-China relations, which is to say that they were rarely cancelled or postponed by the Chinese side (until 2018). On the positive side, right after the Sunnylands Summit between US President Barack Obama and Chinese Chairman Xi Jinping in 2013 and the good atmosphere it generated, many Chinese participants told us they would recommend that Beijing accept the US offer to go to Track-1. Since then, numerous Chinese participants continued to argue that they supported a Track-1 process “in some fashion.” Also, considering the dialogues were held approximately twice a year for about a decade with many of the same participants, it is reasonable to conclude both sides found them useful, although for

different reasons. US arms sales to Taiwan sometimes caused waves of objections and indignation from Beijing that spilled over into the Track-1.5 process, but in such cases the dialogues usually went forward without much delay.

Breakout sessions and tabletop exercises were especially useful in getting the Chinese to speak more freely; the smaller groups, gaming, and role-playing, as they usually do, fostered a more inviting atmosphere for engagement and discussion of the sides' motives and moves.

As noted, the dialogues also sought to establish and maintain a “community” of regulars, which over time became comfortable enough to either skip or fly through their pre-packaged, rote talking points, and get to genuine discussion. To encourage this the conference organizers noted at the outset of each dialogue that participants were speaking in their “private capacities” and should not be quoted by name. US government participants prefaced their papers and interventions with this qualification as well. Of course, everyone had to be judicious and stay within certain parameters. In other words, no one on either side was under the illusion that they had *carte blanche*, but the structure and composition of the dialogues encouraged free-range debate, and this proved to be one of its major strengths.

In the first few Track-1.5s, representatives from the PLA Second Artillery, and its follow-on organization, the PLA Rocket Forces (PLARF), did not participate. Later, from the late 2000s, they would populate second-tier seats against the back walls of the conference rooms but rarely spoke. Later still, though, they began sitting at the conference table and started contributing in substance. In some cases, they presented substantive papers and made important interventions, which provided valuable

insights into PLARF strategies and operations. At first these were retired officers but active duty officers began attending later and continued to attend for the entire span of the dialogues—until most recently in the last dialogue when no PLARF representatives showed up. The reason was not clear—was it out of protest against US sanctions or, perhaps more likely, because of customs and immigration issues? Another reason advanced was that the United States had sanctioned high-ranking Chinese working on nuclear policy. The message from the Chinese side, however, was that the PLA would participate again when the dialogues resume.

It was important that the PLA participate, in part because such dialogue with the Chinese was so rare, and interaction with the PLA even more so. Especially today, opportunities to interact with the PLA are limited, making it difficult to understand its goals, priorities, and concerns.

Over the years, the quality of the discussions varied from meeting to meeting, depending on the expertise and seniority of the Chinese delegations. But there were almost always illuminating discussions that offered insight into Chinese thinking. The dialogue was also a “canary in the cage” that could detect issues of special concern to China—US BMD deployments for Japan and the Republic of Korea (ROK), for example. They were a window into Chinese reactions to these measures. When conducted with essentially the same participants twice a year for almost a decade, it became easier to tell when the other side was more confident or quiet, angry, frustrated, confused, incredulous, dismissive, or otherwise more difficult than usual. Most important, it helped assess whether this foreshadowed any significant change in US-China relations.

In retrospect, and as discussed in more depth later, the political backdrop for the dialogues

was also changing—shifting to a more intense and openly competitive relationship in which, initially, China was welcomed as a “responsible stakeholder” in the making in the mid-2000s, then regarded as a global competitor (starting in the early 2010s), and then as a potential geopolitical adversary from 2017. In later years, China began to accuse the United States of atavistic, “Cold War thinking” that seeks to prevent China’s rise—thinking that cannot come to terms with the possibility of US primacy coming to an end. At the same time, however, some Chinese insisted (and continued to do so) that the United States and China should try and develop a “constructive nuclear relationship,” to use the words of a high-level Chinese strategist in 2017. At the last dialogue, and using the same line of thinking, many also insisted that the nuclear relationship should be insulated from emerging troubles in the broader relationship.

Chinese concerns about US efforts to contest growing Chinese power in Asia were detectable earlier in the dialogues, but in more recent dialogues it permeated Chinese thinking. The Chinese complained bitterly about the US “rebalancing” to Asia in the early 2010s. This included a strengthening of US alliances that Beijing claimed was a pretext for the envelopment and containment of China. In 2018, US participants reported that the Chinese delegation was “edgy” about the Indo-Pacific Strategy and what they regarded as provocative US challenges to China’s territorial sovereignty, notably US freedom of navigation exercises in adjacent waters.

Over time, there was a palpable sense that relations between the two countries were changing and that this change was more toward confrontation than not. Seismic shifts in US-China relations and the broader international security environment were under way, and the dialogues were there to

capture them in real time. Measured in terms of mutual understanding and optimism about our future relations, the dialogues seemed to be going backwards from the early 2010s, reflecting what was happening at the macro-level in our relationship. This was evident in China’s opposition to extended deterrence, which the Chinese previously regarded in more objective terms; most notably, that it had obvious nonproliferation benefits because it helped keep US allies in the region non-nuclear.

Was the Dialogue Useful?

Taken as a whole, from a cost-benefit standpoint, were the dialogues worth the investment and did the United States get enough of what it wanted out of them?

On the surface, one can get the impression that China benefited most from the dialogues. The United States provided China considerably more information about US thought, policies, and programs than China was willing to divulge about itself. At the same time, it is important to consider that the information provided by the United States, for instance about BMD, conventional prompt global strike, and interpretations of the Nuclear Posture Reviews (NPRs), were for the most part already available to the Chinese in the open US literature and unclassified US government publications. Still, the Track-1.5 proved to be an important means of explicating these key strategic documents and publications. The NPRs, in particular, were foundations for discussion. The 2018 NPR, for instance, was viewed negatively in China, so explaining its logic and the US interest in deploying low-yield nuclear weapons was of paramount importance.

The United States, for its part, benefited from Chinese conference papers, interventions, and discussion, in addition to

all-important sidebar conversations with Chinese counterparts. While some of the Chinese papers were not high in quality, others, especially in later years, were exemplary—a few even ground-breaking. They demonstrated serious effort to engage on topics that would be difficult for the Chinese to discuss at the official level.

Unlike China, the United States does not have the same level of access to Chinese information because there is no comparable public domain in China. So, while it seemed that China was getting more out of the dialogues than the United States, under the surface Washington was getting information that was both rare and significant. If the Chinese “won” on quantity, then the United States “won” on the metric of significance. On balance, then, it is the assessment of the Pacific Forum and its partners that the Track-1.5 was a “win-win” proposition.

In the early dialogue rounds, it quickly became clear that the United States and China understood certain basic concepts differently. This raised conceptual barriers that inhibited communication and had to be broken down. The Chinese, for instance, objected to using the term “deterrence”—perhaps the most elemental but also most crucial concept. To them, this term connoted shades of “blackmail” and “compellence”—using force or the threat of force to get someone to do something they do not want to do. If a US expert said the United States wanted to “strengthen deterrence,” the Chinese would look alarmed. “Strategic stability” was another problem concept. As discussed in more depth later, the Chinese perceived it as referring to the broad range of US-China relations bearing on the distribution of power in a global context. If the United States was seeking strategic stability, did that mean Washington was seeking to preserve the status quo and forestall China’s rise? Getting to a common understanding on basic concepts such as

these consumed much time, approximately 4-5 years.

Chinese priorities for discussion varied from dialogue to dialogue. The focus, as discussed more extensively below, was *bilateral* US-China strategic nuclear issues. Initially, the Chinese were not comfortable discussing topics they thought were steeped in “Cold War symbolism”—topics like strategic stability and nuclear deterrence. Often, they called for more focus on possibilities for future cooperation, such as nuclear security and nuclear terrorism, rather than past grievances. In particular, from the early 2010s, they emphasized the need to discuss and develop a “new type of great power competition,” one in which nuclear weapons are but a relatively small facet of a broader, more cooperative relationship.

The role of third actors was also discussed. In the earliest sessions, Taiwan figured prominently, and the Chinese dutifully delivered “boilerplate” complaints and accusations, usually about US arms sales. In subsequent years, though, Taiwan received little or no attention. It was mentioned less, most likely because Taiwan’s domestic policies and the salience of independence proclivities there remained within parameters acceptable to Beijing. The issue became more prominent again in 2016, after Tsai Ing-wen’s victory.

Over time, the Chinese also became increasingly exercised about Japan’s military modernization and the impending reinterpretation of its constitution to permit “collective defense” with the United States. It was common for Chinese participants to buttonhole US delegation members in the hallways to warn them that Japan was “pulling the wool over America’s eyes” and that Japan would try to drag the United States into a war with China by provoking Beijing over maritime and sovereignty disputes. The

Chinese also took great exception to various US congressional “Defense Authorization Acts,” which they claimed demonstrated “hostile” US intent toward China.”

TRACK-1.5 VERSUS TRACK-1 DIALOGUE

From a US perspective, the main objective of the Track-1.5 dialogue was to help pave the way for Track-1 discussions on nuclear issues. The United States has long sought such a dialogue, in part as a confidence-building measure (CBM) with China, but also to help strengthen strategic stability and avoid misperceptions and miscalculations that could lead to an expensive arms race, escalation, or war. It is worth noting that while requesting a Track-1 dialogue, the United States did not change its nuclear deterrence posture *vis-à-vis* China. Its posture changed solely to address the North Korean problem. There is an important caveat, however: the US regional BMD posture seeks to provide protection to US allies and US forces in the region from any missile attack, whatever its source.

A Track 1 dialogue, it was reasoned, might also promote greater Chinese transparency regarding its strategic nuclear doctrine, strategy, and force structure. Unlike other permanent members of the United Nations Security Council, or P-5, China publishes almost no information about its nuclear programs and its defense budget. This lack of information left sizable gaps in what we knew about China’s capabilities and intentions—gaps that invited imaginative, but not always helpful, speculation. It encouraged US policymakers to think about worst-case scenarios. With good reason, for example, US and other observers were certain that China’s defense budget was vastly under-reported. Former US Secretary of Defense Donald Rumsfeld, for instance,

was concerned about this lack of transparency and once called upon China to “de-mystify” its nuclear weapons program and modernization effort.

Over the course of the Track-1.5 dialogue, and barring China’s aversion to greater transparency with regard to issues such as the size of its nuclear forces, it appeared that both sides were committed to avoiding misperception and miscalculation. While there was no shying away from discussing a number of “hard problems” at length, both US and Chinese participants displayed a willingness to candidly discuss ways to reduce risks. It quickly became clear, for instance, that in addition to Taiwan, other “hot spots” were the Korean Peninsula and maritime issues in the East and South China Seas.

Such issues were especially important given China’s rapid rise as a strategic competitor and potential US adversary. The dialogues were excellent venues to raise topics for discussion in an official Track-1 dialogue, should it materialize. Conference organizers were prepared to draft a tentative agenda for such a dialogue shortly after the Sunnylands Summit. This proved a step too far, however: Beijing continued to resist Track-1 engagement. The US response was to insist that a Track-1.5 dialogue could not be a substitute for Track-1 discussions. Washington also clearly stated that if Beijing would not agree to go to Track-1, then Washington might stop supporting (e.g., funding or participating in) the Track-1.5. The vision, from a US perspective, was to go to Track-1 and use the more mature Track-1.5 process as support.

In part to drive home this point, Washington decided that a detailed briefing for China on the unclassified version of the 2010 US NPR had to be done in a Track-1 briefing. The Chinese, however, declined, no doubt with confidence that it could get the information

it wanted elsewhere. The Chinese also refused to engage in the lead-up to the 2010 NPR; Washington had given them an opportunity to weigh in to ensure that Chinese equities were taken into account.

So, it became increasingly clear that the Track-1.5 could not leverage China into official discussions. As a result, the Track-1.5 was virtually “the only game in town” when it came to engaging China on strategic nuclear issues. As mentioned, however, the US side was consistent in stating for several years that this was not sufficient and that Chinese refusal to go to Track-1 risked derailing the Track-1.5.

Across the span of the Track-1.5 dialogue, there was no sustained official dialogue between the United States and China on strategic nuclear issues. In 2006, a presidential summit commitment to dialogue was secured, but never honored. This was disconcerting given that US-China relations would likely become the paramount international security issue of this century. Both sides generally agreed that avoiding the “Thucydides Trap” as China becomes a peer US military competitor with the world’s largest economy will require careful and sustained effort and, perhaps most of all, communication to avoid crises and escalation to war.

As previously noted, the US position at the outset was that the Track 1.5 could not substitute for an official Track-1. US officials in the departments of State and Defense were nonetheless kept informed of what transpired in Track-1.5 proceedings and consulted beforehand about timing, substance, and US messaging priorities. Of note, over time, many US government officials became regular and active participants in the dialogue, even though they attended only in their private capacity. The primary US objectives were to sound out Chinese strategic thinking, identify, and

address misconceptions and concerns and, to the extent possible and appropriate, facilitate the launch of a Track-1 process.

Nevertheless, the Chinese, at very senior levels, did not think the time was right for a Track-1 dialogue. They argued that they did not want such discussions to define our overall relationship; moreover, they anticipated being pressed for more transparency about their forces and force-planning work, which they were unwilling to provide. This, in turn, would make a Track-1 adversarial, as in the case of US-Soviet relations: they insisted that they did not want nuclear weapons to become the “centerpiece” of US-China relations. Moreover, they argued that engaging on strategic stability made no sense given the disparities between our arsenals.

Over time, however—after numerous US requests for a Track 1—the Chinese began claiming that official discussions were unnecessary because we already had a regular and successful Track-1.5. The US delegations disagreed strongly and warned that the Chinese were seriously mistaken if they thought the Track-1.5 could take the place of an official, formal dialogue; moreover, such reasoning could easily jeopardize the Track-1.5.

The Chinese explained that Beijing was committed to transparency, military-to-military dialogue, and sustained, substantive high-level talks, but that the United States “had to be patient” and demonstrate commitments to “mutual respect and trust.” In other words, the message was “don’t call us, we’ll call you when the timing is ‘appropriate.’” The standard talking point was that they would engage “when the conditions are ripe” without, however, further elaborating on what these conditions were.

The Chinese sought to reassure Americans that they were trying to build consensus in Beijing to begin a Track-1. The sides agreed the dialogue should consider the impact on deterrence and strategic stability of space and cyber, as well as nuclear and conventional domains to help lower the risk of “inadvertent escalation.” Other areas identified for more cooperation were nuclear nonproliferation and nuclear security. The Chinese also admitted that they needed US expertise and advice to strengthen their export control and nuclear material protection systems—nonproliferation essentials on which the two countries cooperated well, government-to-government, notably after the establishment of the nuclear security center of excellence near Beijing. The center opened in 2016 and is still running, although cooperation with the United States has slowed down recently.

From China’s perspective, the US 2018 NPR was taking the US-China relationship back to the Cold War era: The United States was expanding and strengthening the role of nuclear weapons rather than reducing them, notably by enhancing the role for low-yield nuclear weapons. Beijing claimed this would lower the nuclear threshold, especially as US conventional superiority was waning in the region vis-à-vis China’s massive military modernization. Beijing also expressed concern about the possibility of a costly arms race with the United States but cautioned that it could afford one if necessary. The Chinese, in short, were subscribing, de facto, to US constructs of “strategic stability,” to which they objected during the Obama years. It was not long into the Trump administration, however, before the United States dropped the concept of strategic stability from its lexicon.

Another possible sign of trouble came late in the summer of 2018, when the Chinese side said it was not ready to hold the Beijing meeting, scheduled to take place in the fall;

no Beijing dialogue session took place in 2018. Then, in May 2019, for the first time in several years, no PLARF officers participated in the Hawaii dialogue round. This was reminiscent of early Track-1.5 rounds when at first the PLA did not attend, and while, as mentioned earlier, other factors may have kept them from attending, there was concern that their absence signaled a further deterioration in our relations and a weakening of Track-1.5 norms. Because the Chinese side then did not commit to hosting the 2019 Beijing dialogue session in the fall, the US sponsor of the dialogue, after close consultations with various US government agencies, decided to give the US Chinese side an opportunity to reschedule by March 2020. Unfortunately, the Chinese side did not deliver.

On the positive side, academics and researchers on both sides agreed to work in the interim on joint US-China academic, i.e., Track-2, exchanges to promote mutual understanding and cooperation on issues of particular concern. They met in Beijing in the fall of 2019. Interestingly, during these exchanges some Chinese strategists stressed that, looking ahead, a primary goal should be to try and insulate the US-China nuclear relationship from the broader and increasingly competitive US-China political and economic relationship. It is important to note that by the mid-2010s, several Chinese participants were in favor of launching a Track-1 dialogue (and explicitly said so on multiple occasions). They also said Beijing was not ready, and one Chinese participant stressed that Beijing “was not listening to us” (referring to Chinese subject matter experts, not officials). US participants responded by explaining that time was running out, as towards the end of the Obama administration the mood was changing in Washington, with less interest in open-ended engagement. As one US participant put it in 2016: “Patience is giving way to skepticism

that Beijing will ever agree to a Track-1 dialogue.”

A CHANGING BACKDROP

The most significant external factor affecting the Track-1.5 over the last decade has been the rapid development of China’s economy, military capability, and its elevated regional and global stature. The geo-strategic environment of the dialogues is quite different today than it was when they began a decade and a half ago. China began the Track-1.5 dialogue as a self-described “developing country” with a small, mostly land-based nuclear arsenal. Today, its economy is expected to surpass the United States in the next few years, its military has grown to near peer competitor status, and while its nuclear arsenal remains much smaller than the US and Russian arsenals, it has grown in size and it now includes many and much more diversified delivery systems. Significantly, China is about to enter the exclusive club of nuclear-armed states possessing a triad, i.e., with land, sea, and air nuclear platforms. No longer hanging back from global engagement and leadership, and with growing confidence, China is now prepared to challenge the global order that the United States and like-minded countries constructed after the Second World War, to include, especially, US military primacy in Asia.

One of Beijing’s main concerns was—and remains—whether the United States will accept China’s new role or seek to limit the growth of its economic, political, and military power. Judging from the dialogues, the Chinese concluded that Washington aims to keep China from assuming its rightful place in a new world order. They tend to see US efforts to contain them “behind every bush.” In Chinese eyes, the US “Return to Asia,” the

“Pivot” to Asia, and the more recent Indo-Pacific Strategy were all interpreted as US moves to check China’s growth, power, and influence.

Chinese participants in the Track-1.5 expressed growing confidence that China could alter or replace the existing order in the long run. China, they explained, presently enjoyed a “favorable security environment,” i.e., one that gives it latitude to pursue its geopolitical objectives, peacefully. That “window of opportunity,” however, is closing, given the US reaction to China’s rise and that, at some point, the risk of US-China conflict will increase significantly. The Track 1.5 rode the crest of this geopolitical change as China morphed from “stakeholder” to “adversary.”

Post-Sunnylands, the US and Chinese delegations began talks with optimism about US-China relations. The ensuing dialogue, however, revealed that China’s conception of “mutual respect” meant essentially that the United States would accommodate a Chinese sphere of influence in Asia. This, of course, was patently unacceptable to the United States and its regional allies. At this point, US participants began to feel what they described as “an edge in the room”—a sense that something had changed in our relationship with China; that our competitiveness had shifted into a much higher gear.

From a US perspective, the key question has been: “Will China accept the status quo or adopt more expansionist and assertive policies that truly challenge the existing order?” Critically important though, is that both sides recognized that in this competitive environment they would need to take special care to manage US-China relations to promote stability, avoid crises, and tamp down the risks of miscalculation and escalation to war. In that context, the ability to manage nuclear risk has become especially

critical. Plainly, the increased competitiveness and growing risk of confrontation made it increasingly important for the two sides to have a forum for identifying and building upon common interests and airing their differences about strategic issues, and nuclear weapons in particular.

The Track-1.5 was, and continues to be, a promising venue for addressing such a question, and dialogue organizers responded to this changing backdrop accordingly. They began by addressing each side's perceptions of the new security environment and then broadening the agendas to include crisis management, signaling, CBMs, launch notifications, nuclear safety and security, and dialogue on the necessary scope of nuclear transparency. It was also necessary to begin looking at escalation dynamics and options for mitigating strategic nuclear competition.

Early in the Track-1.5, the Chinese sought to downplay the urgency of addressing our strategic nuclear relations. They sought rather to stress the importance of marshaling "cooperative potential" in such issue-areas as nonproliferation, North Korea, civil nuclear cooperation, and space technology.

The Chinese were also concerned that the United States would interfere with their efforts to bring third parties in the region, like Vietnam, the Philippines, and Indonesia, under Beijing's sway. They cautioned that a strengthened US-Japan alliance would embolden Japan, whose plutonium stocks, they hastened to point out, continued to exceed its peaceful needs. Both delegations then recognized that third-party issues in the region would have to be managed carefully to avoid incidents with high escalation potential and manage them if they occurred.

To US participants, it seemed that we were unlikely to dispel Chinese suspicions of US strategic intent, i.e., containment. The

Chinese were uncomfortable with the 2018 NPRs' treatment of China and how it fit US nuclear strategy. The Chinese felt vindicated when the United States again began to contemplate the deployment of low-yield nuclear weapons that would afford Washington more usable nuclear options on the escalation ladder and strengthen deterrence at lower levels of conflict. There were also concerns about US "bunker busters," which they envisioned being used against China, perhaps in a Taiwan scenario. Particularly important, the Chinese saw the United States move toward "nuclear deterrence of conventional operations in Asia." In their view, this suggested a possible US nuclear first-use against China in a Taiwan, North Korean, or Japanese conventional contingency.

Taking all this in, there appeared to be consensus on the Chinese side that US policy toward China had changed substantially in recent years. These changes were reflected in the Track-1.5 agendas and ensuing discussions.

KEY TOPICS OF DISCUSSION

Strategic Stability

The Track-1.5 spent a great deal of time discussing strategic stability and related concepts and how they apply to the US-China strategic experience. They drew experts on both sides into discussions about when US and Chinese nuclear weapons might be used and how—discussions that few Chinese probably ever thought they would have with Americans and vice versa. As a result, US participants gained a better understanding of China's nuclear lexicon—

terms like “lean and effective,” “absolute security,” and “NFU.”

US participants wanted to be certain that China understood what was meant when they used terms like “transparency,” strategic stability,” and “deterrence.” It soon became clear that there were differences of interpretation. Getting over these hurdles was precisely the preparation needed for a future Track-1, given the importance of “speaking the same conceptual language.”

When the Track-1.5 began, the Chinese deflected many US questions about their nuclear forces and strategic doctrine. Strategic stability as it pertained to the narrower issue of nuclear weapons was, by their own admission, not a high priority for Beijing. Rather than focus on nuclear strategy and doctrine, they wanted to consider the broader sweep of US-China relations and, particularly, how the United States could “accommodate” a rising China while maintaining stability. As they explained, when President Obama invited them to a Track-1 dialogue on strategic nuclear weapons, they did not fully grasp what the United States wanted to discuss. They also resisted discussion of “deterrence,” in part because the Chinese concept of deterrence had connotations of coercion and blackmail, topics the Chinese said were not appropriate to discuss.

The Chinese were more interested in discussing a new paradigm of strategic stability—one not built around deterrent threats, especially nuclear blackmail—but broader ideals of cooperation and “mutual respect.” Their interpretation was that strategic stability more properly referred to the development of a broader US-China relationship that included a prominent role for China in an international order with “Chinese characteristics” and a “new great power relationship” in which the United States accommodates China’s rise. US

participants, on the other hand, viewed strategic stability as an equilibrium in which states calculate that nuclear use is not worth the consequences (crisis stability), so they avoid taking actions or subscribing to doctrines and strategies that elevate the risk of nuclear use or a costly arms race (arms race stability).

Despite a willingness to discuss the broader dynamics of US-China relations, the Chinese spent a great deal of effort in almost every session seeking some indication from the United States that it would not seek “absolute security” by negating China’s second-strike retaliatory capability. In their estimation, this could be achieved in part by the United States accepting mutual strategic vulnerability and pledging not to use nuclear weapons first. Appropriate force structures for such a doctrine would presumably follow suit, although the details of such an arrangement were never discussed. From China’s perspective, however, strategic stability could be maintained at asymmetrical force levels so long as China’s second-strike nuclear forces remained viable.

Mutual Vulnerability

Underlying nearly all China’s angst about its strategic nuclear relations with the United States was its conviction that, as just mentioned, Washington was after “absolute security”—invulnerability at everyone else’s expense, especially Beijing’s, and that a key element of this strategy included a US nuclear capability to strike first and destroy Chinese strategic forces. This, combined with US conventional precision strikes against Chinese strategic targets and BMD preventing Chinese missiles from striking back, might neutralize China’s deterrent and render the United States “invulnerable” to Chinese nuclear retaliation.

As a result, the Chinese delegations probed the US side for interest in a bilateral, US-China pledge to accept “mutual vulnerability,” which, in practice, would require the United States to limit its BMD systems along with other capabilities.

US delegation members—some very senior with vast experience in nuclear arms control and US national security policy—readily acknowledged that “mutual vulnerability” with China—like it or not—was already an “objective fact.” That said, they explained, it would not be possible politically for a US President to go before the American people, Congress, and US allies who depend on the US “nuclear umbrella” (notably Japan) to acknowledge and accept US vulnerability to China. Acceptance of “strategic stability with China” was as far as the United States could go.

Still, the Chinese continued to raise the issue and expected the United States to make the pledge eventually. This is despite the fact that they seemed somewhat satisfied that the US objective of maintaining “strategic stability” with China could be interpreted as a tacit acknowledgment of “mutual vulnerability.”

The Chinese also explained that they were working to enhance the effectiveness of their strategic forces, which could mean deploying a larger, more diversified force if necessary. From the early 2010s, the Chinese delegation began projecting growing confidence in the survivability of their second-strike retaliatory capability and continued to express interest in a new type of strategic stability based on mutual vulnerability at lower force levels than the United States and the Soviet Union maintained during the Cold War. Significantly, the Chinese stressed that Beijing did not, and would not, seek strategic “parity” with the United States and, therefore, that US concerns about a possible “Chinese sprint to nuclear parity” were unfounded.

Chinese strategists cautioned, however, that if the United States were to attack China with nuclear or conventional strikes on its strategic forces and command-and-control nodes, China would have to retaliate “with all it had” or risk losing its retaliatory capability altogether. Their targets, in other words, and humanitarian considerations aside, would have to be major US population centers. The message was clear: nuclear war with China could not be limited, hence the need for a strategic relationship based firmly on mutual vulnerability.

In more recent dialogues, the Chinese warmed to the US interpretation of strategic stability as an operating concept. Unfortunately, this came as (or perhaps because) the Trump administration was in the process of adopting an alternate concept. There is still no clear-cut, common definition of “strategic stability,” but we are undoubtedly closer to one thanks to the Track-1.5. This should make it easier to make progress if ever there is an official dialogue.

At the fall 2019 Track-2 event, in making their case for establishing a US-China strategic relationship based on mutual vulnerability, the Chinese academics and policy analysts in the room made concerted and coordinated comments about how US activities in Asia could generate strategic instability. They noted US reconnaissance activities along China’s coast where the PLA had strategic assets. Depending on how the US threat evolved, they said such activities could lead to quantitative adjustments in Chinese force levels—another indication that their “minimum deterrence” and “lean and effective” force levels were on a sliding scale and dependent on what the United States did.

The message was clear: a combination of US conventional strike forces, BMD, space-based assets, coastal surveillance, and US strategic modernization could drive China to

take countermeasures leading to a larger, more sophisticated and potentially destabilizing strategic force structure to ensure that mutual vulnerability is maintained.

Another Chinese concern was the growing US interest in deploying low-yield nuclear weapons. Such weapons, it was argued, would enhance the credibility of US deterrent threats by putting more intermediate nuclear-use rungs on the escalatory ladder. The Chinese and others viewed this as lowering the nuclear threshold and increasing the likelihood that nuclear weapons would be used. It also appeared to validate the Chinese suspicion that the US policy of reducing the role of nuclear weapons was not serious. This in turn raised Chinese concerns that Washington might use nuclear weapons against Chinese “conventional operations in Asia,” i.e., on the Korean Peninsula, against Japan, or in a Taiwan crisis.

Plainly, the Chinese feared that the United States was seeking to improve its ability to fight nuclear wars while trying to move away from mutual vulnerability.

No First Use

There was a great deal of consistency within the Chinese delegation on NFU, the dominant theme being that China would never use nuclear weapons first. The Track-1.5, however, revealed differences of opinion on whether China’s NFU policy would apply in all cases. For example, would it hold up if precision-guided conventional strikes were depleting China’s second-strike retaliatory capability? Some Chinese held the view that NFU could not be sustained in these circumstances. Some Chinese also brought up the bizarre but appropriate question of whether the Chinese NFU pledge would apply to Taiwan since, from Beijing’s perspective, Taiwan was not another country

but a part of China. Could China use nuclear weapons against “China” without violating its own NFU pledge?

From a US perspective, there was concern that China’s military modernization could lead Beijing to take a much more critical look at its NFU policy and its attendant force structure. US delegations acknowledged that NFU was a good, stabilizing policy for China—certainly preferable to limited nuclear first use, “counterforce,” or war-fighting doctrines. That said, Americans were quick to stress that the United States did not give much weight to NFU, viewing it as an unverifiable political statement that does not necessarily translate into nuclear posture or strategy, and thus is of little value in stabilizing the relationship.

The Chinese seemed to have done some serious thinking about nuclear weapons doctrine. From their perspective, the future was uncertain because of growing doubts about how to maintain a second-strike retaliatory capability under NFU. The Chinese revealed that there had been a wide-ranging debate in Beijing over whether an NFU policy could be sustained if China had to absorb US conventional and/or nuclear strikes against its strategic assets. The Chinese delegation did not elaborate on details of the debate but reported that NFU prevailed and that it remained the keystone of Chinese nuclear doctrine.

Meanwhile, most of the Chinese delegation understood that the US refusal to adopt an NFU policy did not mean it had a policy of “first use,” but some continued to draw this conclusion regardless. This, of course, was not correct and US delegations intervened repeatedly to remind and underscore that, while US doctrine did not rule out first use, it did not require it; moreover, the United States was much more likely to employ other means before “going nuclear,” again with the

important qualifier that this did not amount to a “last resort” policy either.

Because their Chinese counterparts repeatedly pressed the United States to adopt an NFU policy, US delegations explained, as mentioned earlier, that such a US policy would do little to strengthen strategic stability. Significantly, Americans added that it would shake the confidence of US allies in the region, notably Japan and the ROK, whose security depends on US extended deterrence. Although extended deterrence includes both nuclear and conventional means, probably no amount of US reassurance to allies could compensate for a US NFU pledge with China. Worse, such a pledge might contribute to nuclear proliferation in the region and further weaken the Nuclear Nonproliferation Treaty (NPT)—developments that, from a US perspective at least, would be in neither side’s interest.

It should be noted as well that NFU pledges would be just that—pledges. The United States would have great difficulty explaining to allies that a key component of extended deterrence—the US nuclear umbrella—was bargained away for a Chinese declaration that few expected would hold in a major crisis.

China’s fixation on an NFU pledge had much to do with the importance Beijing attaches to safeguarding its second-strike retaliatory capability and ensuring US vulnerability to Chinese retaliation, which they also highly prized. Most importantly, though, it probably was to get a US commitment not to use nuclear weapons against Chinese conventional operations in the region, e.g., on the Korean Peninsula, against Japan, or in a Taiwan contingency.

Their reasoning still seems muddled, however: if the United States strictly adhered to an NFU pledge, then China should have no need for a retaliatory capability. Given

Chinese suspicions that US intentions can change (as they did with the Anti-Ballistic Missile Treaty), why would Beijing rely so heavily on a mere US pledge not to use nuclear weapons first? The pledge would lack credibility unless the United States also relinquished its capability to strike first. If this were possible, it would need to be done in conjunction with Russia and most likely in a P-5 or P-5+3 context—also extremely difficult under the best circumstances, if not impossible. So, the NFU pledge, as simple as it may seem on paper, would require considerably more baggage if it were to be something more than a “feel good” exercise. A much better explanation for the Chinese’s fixation on NFU may be China’s strong interest in weakening US alliances in Asia.

Ballistic Missile Defense

US BMD development and deployment—especially in East Asia—was a ubiquitous Chinese concern. Their fixation on US BMD systems and whether or not they could be effective against Chinese intercontinental ballistic missiles (ICBMs) was a key element of the discussions.

US and allied missile defenses were a preeminent Chinese concern. From Beijing’s perspective, US BMD might render their entire NFU edifice unstable—depending on what capability the United States and its allies deployed, for what reason, and—especially important—depending on technical breakthroughs and what future US administrations could do with them.

Officially, US BMD systems were deployed to counter North Korea and Iran, adversaries with very limited ballistic missile capability against which these systems could be effective. US participants made clear that key US strategy documents stress that the United States does not seek to undermine the strategic balance with China (or Russia) with

BMD. Note, however, and as mentioned earlier, that US participants explained on multiple occasions that the US regional BMD posture is meant to protect US allies and US forces in the region from *any* missile attack, regardless of its point of origin. The Chinese were also warned, officially and unofficially, that North Korean nuclear and ballistic missile tests and related provocations would cause the United States to expand and enhance its BMD capability in the region. US participants in the Track-1.5 drove home this point repeatedly: North Korean provocations would invite US and allied BMD deployments to which China would object, so it was in both Chinese and US interests to pressure Pyongyang to halt its tests and get serious about denuclearization.

The Chinese, however, were convinced that US BMD systems deployed against North Korea would have more than just marginal capability against Chinese missiles. They insisted that US BMD could be quickly augmented to provide more coverage of China. Of even greater concern was the prospect of the United States working with Japan and the ROK to develop an integrated regional missile defense that, in addition to being capable against Chinese missiles, would solidify alliance cohesion and possibly be used in a Taiwan crisis.

The obvious question was whether US BMD systems would eventually be directed against China, and what impact that would have on China's deterrent force and related doctrine. Another key question was whether NFU would continue to be the best doctrine for China if its retaliatory capability were eroded. This, the Chinese argued, was why the quality and quantity of their nuclear arsenal had to be reactive and adjustable to whatever defenses the United States and its allies might raise against them. In particular, they complained that the SM-3 Block IIA interceptor could have capability against Chinese ICBMs and even submarine-

launched ballistic missiles. In 2011, Chinese participants gave formal presentations concluding that under certain circumstances (extremely unlikely according to US experts) US and Japanese sea-based missile defenses could be just as threatening to China as ground-based interceptors. Chinese military leaders were said to consider capability over intent because intentions can change rapidly; PLA participants in the Dialogue were less subtle: "We are not idiots... who think you are transparent in your BMD intentions... We can't believe... claims that BMD only targets North Korea in East Asia."

Another Chinese concern was that the US Theater High Altitude Area Defense (THAAD) X-band radar—part of another regional defense system—could enhance US early warning of a Chinese mobile missile launch. The Chinese were particularly concerned about a prospective ROK deployment of THAAD. They viewed it as not just a US reaction to increasingly capable North Korean missiles, but also a system for direct use against China. Some dialogue participants speculated that China was the primary target and that North Korea was just a convenient pretext. They distrusted THAAD's technical limitations and dismissed US assurances that it posed no threat to China. The US government sought to address their concerns by offering an official technical briefing on THAAD, but the Chinese declined the offer.

A briefing was given at the Track-1.5, however, which led the Chinese to raise a range of follow-on questions. The specificity of their questions suggested they had analyzed the issue in depth before the dialogue. They were mainly interested in knowing if THAAD could be rapidly re-oriented when in a forward-deployed vice fire control mode. They were also interested in the number of THAAD batteries needed to defend the ROK and how these systems would interoperate with ROK BMD

systems. Simply put, the Chinese believed the United States forced THAAD on the South Koreans, that it would be of little value in defending the ROK against North Korea, but it could potentially cover large swaths of Chinese territory and thereby threaten China's deterrent. At any rate, Beijing was so upset that it sought to punish Seoul as a result.

The debate continued in 2017, with the two sides in deep disagreement about whether BMD systems endangered China's deterrent. Meanwhile, the North Korean missile threat to US and allied targets continued to mature. US participants could only reiterate that THAAD had technical limitations that would prevent it from challenging China's revered second-strike capability. The Chinese, however, remained distrustful and warned that they might have to react by adjusting, e.g., building up, their own strategic forces in response. Otherwise, their NFU policy would become less viable.

In addition to THAAD, the Chinese pointed to a range of other developments they believed could rapidly change the security environment and disadvantage China. These included the formidable US conventional strike capability, growing US interest in deploying low-yield nuclear weapons, the ever-present possibility of a US technical breakthrough on BMD, and a rapidly evolving political context in which the United States increasingly viewed China as not just a competitor, but also an adversary. Significantly, the Chinese also began voicing concerns about India's growing nuclear force in the early 2010s.

By the Chinese delegation's account, then, their strategic environment was deteriorating—the window through which China could achieve its strategic objectives peacefully appeared to be closing, and under such conditions China might be compelled to shift its requirements for “minimum

deterrence” upward. The Chinese expressed confidence that they had the resources to compete, if necessary. As several interlocutors put it, they wouldn't like it but—unlike the Soviet Union—they could afford it.

Still, both sides recognized the potential for an unwanted but difficult to avoid offensive-defensive arms race. The Chinese were careful to stress that China's modernization effort would be well calibrated to avoid an arms race. In exchange, they recommended that the United States commit to low-level BMD effectiveness. This, of course, would be a tough sell in Washington, which had little to no inclination to limit such capability formally.

Extended Deterrence

The dialogues grappled with US extended deterrence from the very beginning. The purpose of extended deterrence has always been to deter US adversaries and reassure allies that US commitments to their security would be honored in the event of an attack, to include the possibility of nuclear use in addition to conventional means.

After nearly a decade of discussion, extended deterrence continued to concern and confound the Chinese. They mostly viewed it, along with the US “rebalance” to Asia and then the Indo-Pacific Strategy, as a potentially dangerous throwback to the US Cold War strategy of “containment.”

US delegations in earlier dialogue rounds noted that China was ambivalent about extended deterrence. Despite its distaste for US alliances, some acknowledged begrudgingly that extended deterrence and the US nuclear umbrella performed a valuable service by obviating any need for independent Japanese and South Korean nuclear weapons programs. US participants were able to extract a reluctant admission

from the Chinese that extended deterrence, however distasteful, had a real and useful nonproliferation function that was stabilizing. Still, the Chinese were highly suspicious. Some characterized extended deterrence as a “fig leaf” for Cold War-style containment. Others accused the United States of being “naive” about Japan, which they said had to be “controlled.” They did not, however, directly acknowledge that the United States was better positioned to influence its allies under extended deterrence than it would be otherwise.

As the dialogue progressed, the Chinese became increasingly suspicious and critical of extended deterrence as tensions rose with Japan over maritime and sovereignty issues, Japan’s military modernization, and the re-interpretation of Japan’s constitution to permit collective defense with the United States. By the 2013 dialogue, US participants detected a rising hostility toward extended deterrence. In 2015, the Chinese participants used some of their strongest language yet against it, complaining that it “molests” Chinese interests and encourages Japan to behave “recklessly” and “wild.”

Japan was not alone in seeking stronger US nuclear assurances under extended deterrence. In response to North Korean provocations, some in the ROK asked the United States to redeploy tactical nuclear weapons on the Peninsula. (For reference, the main purpose of the request was, by and large, to pressure Beijing into pushing Pyongyang harder toward denuclearization: the idea was not to enhance warfighting options against Pyongyang, although some South Korean voices do encourage such moves.) Starting in the mid-2010s, Chinese participants also began to raise concerns about Australia and the Philippines discussing ways they could strengthen the defense and deterrence components of their alliances with the United States.

The Chinese, keeping to the “containment” theme, likened extended deterrence to the deployment of tactical nuclear weapons in Cold-War Europe. The ROK request for deployment of tactical nuclear weapons on the Peninsula only amplified these Chinese concerns. The back-and-forth on this issue also revealed how high the Chinese perceived themselves in the international “pecking order.” Chinese interlocutors in the Track-1.5, for instance, advised the United States to “privilege the US-China relationship above others,” i.e., before US allies. This China-centric proclivity was noted elsewhere around this time, with Beijing parroting (with some license) President Kennedy’s oft-cited challenge: “Ask not what ‘China can do for you, ask what you can do for China.” Clearly, this was not the same China the Track 1.5 confronted ten-plus years before.

Escalation and Crisis Management

Both US and Chinese participants recognized that as China continued to rise and exercise greater power, there could be misunderstandings resulting in escalation (unintended or otherwise), and the possibility of confrontations that spin out of control. While the two sides had different views on how likely this could happen and the utility of preparing for it, there was, over time, general agreement that we should think about “rules of the road” and how to ratchet tensions down during a crisis.

That said, the Chinese were uncomfortable talking about escalation and crisis management, so much so that they initially vetoed putting the topic on the agenda. They maintained that nuclear weapons were not central to the difficulties the two sides would most likely face in the future. US participants, for their part, were increasingly concerned that the Chinese did not take the possibility of escalation seriously enough.

China's aversion to discussing crisis management appeared to be strongly influenced by its conviction that nuclear war was uncontrollable. They had little interest in "manipulating risk" during a crisis to get a desired outcome—e.g., intentionally taking risky actions that increase uncertainty or the probability of uncontrollable escalation to achieve a political purpose. Their view was that if China were attacked with nuclear weapons or conventional weapons with strategic effect, retaliation would have to be "all out," otherwise China's remaining force would be destroyed on the ground. There would be no room to manipulate risk with a progression of escalatory moves aimed to influence the other side's behavior and the outcome of the conflict.

Still, the sides eventually agreed it would be worthwhile for the dialogues to study a nuclear crisis. They also agreed that they could get more latitude for discussion if the tabletop exercises involved fictitious powers or other states (like India and Pakistan) that possess nuclear weapons. US participants also pressed the Chinese to get their armed forces more deeply involved in Track-1.5 exercises. During these exercises, there was discussion about the escalatory potential of co-mingling nuclear and conventional weapons, targeting space assets, and Chinese concerns about the possibility of the US using nuclear weapons coercively, and a rare discussion of how alerting of nuclear forces could generate incentives for preemption. Generally, however, the Chinese were more withdrawn when escalation and crisis management were discussed, and they were not prepared to engage fully on the topics.

In more recent dialogues, however, Chinese strategists continued to express interest in these topics and suggested that Beijing was considering the issue more seriously. One reason, perhaps, was the rising importance of space and cyber and their potential strategic effects. The Chinese, for instance, were very

attentive to the Stuxnet worm that reportedly "took down" Iranian uranium enrichment centrifuges. The Chinese called it an attack against a nuclear complex that set a dangerous precedent for escalation dynamics. In that context, both sides agreed it would be worthwhile to expand the focus of the Track-1.5 from strategic nuclear dynamics to include cross-domain interactions of missile defense, space, cyber, and conventional weapons.

One key area to address would be the lack of clarity on both sides as to what constitutes a strategic attack and, following from that, what form of retaliation would be warranted. For instance, should retaliation be symmetrical, e.g., confined to the same domain, and, if so, would its example have sufficient deterrent value in the future; and if retaliation were from a different domain would it be considered escalatory and deserving of a stronger response—one the other side might view as an unacceptable over reaction? As one US participant explained, "'integrated deterrence' is easy to say and hard to do." In a crisis or conflict where military operations are occurring across multiple domains, signaling will be especially difficult and the chances of misperception and inadvertent escalation would increase. The Track-1.5 only scratched the surface of these topics.

Both sides also became increasingly concerned about how space assets would be treated in conflict. There was little confidence in the portability of concepts across domains. The greatest potential for misunderstanding was recognized to be "gray zone" challenges in outer space and cyber space where traditional principles of deterrence may or may not apply. Both sides were concerned that strikes on cyber and outer space systems could escalate first to conventional conflict and then to nuclear war.

This was not immediately obvious, however. In one revelatory moment, for instance, US participants reacted quickly to debunk the idea that Chinese strikes against US space-based assets would be de-escalatory. Chinese reasoning was that since the United States depends heavily on space-based assets even for conventional operations, if its space-based assets were quickly destroyed the United States would have to back down. US participants responded energetically that this was a dangerous misconception and that quite the opposite could be true: Chinese strikes against US space-based assets would be highly destabilizing, escalatory, and, depending on the circumstances, could even warrant a US nuclear response. The Chinese seemed incredulous that the United States would respond to such a threat in such a manner. This “discovery” encouraged both sides to explore cross-domain issues much more seriously.

Both sides recognized that there was much to discuss when it came to outer space and cyber systems, and they agreed on the importance of establishing a dialogue on space and cooperative mechanisms. The Chinese argued for a comprehensive system of rules, referring to the 2008 proposal by China and Russia for a treaty on Prevention of the Placement of Weapons in Outer Space and the Threat or Use of Force against Outer Space Objects. The United States opposes the treaty because it does not believe compliance could be verified effectively and doubts that the Russians and Chinese would implement it.

During these discussions, the Chinese also often complained about US legal and administrative restrictions on space cooperation with China, which, they said, were humiliating. The US side acknowledged the congressional restrictions on cooperation but explained that they involved only NASA activities and did not prevent other agencies

from opening dialogues with the Chinese on numerous other space issues.

Overall, however, there was a lack of clarity regarding China’s willingness to engage the United States in bilateral dialogue on space issues. Chinese participants reported that Beijing was willing, in principle, to engage the United States in bilateral dialogue but subsequently held to the view that such dialogue was unlikely without “an appropriate political atmosphere”—that is, if the United States ended its prohibition of bilateral cooperation with China. They further claimed that the United States was resisting Russian and Chinese proposals because it seeks dominance in the weaponization of space—another example of the United States seeking “absolute security.”

For the Chinese, Taiwan was off-the-board when it came to crises that could be “managed” with the United States. Given Beijing’s uncompromising view that Taiwan is a “domestic issue,” the very notion of the United States and China cooperating to manage a Taiwan crisis seemed far-fetched. Taiwan continued to be a core Chinese interest for which Beijing was willing to fight. Any US arms sales or other forms of “interference” by the United States would have great potential for generating a crisis and quickly shutting down dialogue at any level—unfortunately just when it would be needed most. Any integration of Taiwan into a US regional missile defense system, for instance, would be extremely provocative—very likely beyond the capacity of any pre-established bilateral mechanism for managing and deescalating a crisis. There were indications, however, that maritime conflicts and sovereignty issues with Japan and others were good candidates for discussion of crisis management.

The United States was also interested in exploring the possibility of US-China cooperation in theoretical “high end” contingencies, such as a collapse of the North Korean regime. US participants sought to impress upon the Chinese the importance of discussing contingency plans about North Korea in case of a collapse of the regime, but the Chinese remained generally uninterested. In a related tabletop exercise, the Chinese leadership, when asked what China would do at a critical point in the scenario, simply deflected the question by asking what the United States would recommend. They were reminded that China must speak for China. Later, they confided that they had to be circumspect when talking about North Korea; if the North learned that China was discussing cooperation with the US on a North Korean collapse and reunification of the Korean Peninsula, it would create problems that Beijing wanted to avoid. In what may have been an unprecedented moment of candor and insight, the Chinese qualified that, even if US-China cooperation were possible in such a contingency with North Korea, any US intervention would have to be “like in the 1991 Gulf War”—for limited objectives and not to pursue regime change. Unintentional or not, this appeared to leave the United States some “wiggle room” when it comes to dealing kinetically with North Korea, should it come to that.

Arms Control

China’s official position is that it will not consider joining official arms control discussions—at least not yet. The road to Chinese participation in bilateral arms control with the United States, or trilateral arms control with the United States and Russia, is daunting and not likely to reach its destination quickly or easily. More expansive multilateral arms control was even more doubtful, if only for the complexity of getting that many negotiators to sit down at the same

table at the same time, and proceed in a workmanlike manner.

It is worth noting that Beijing has always conditioned its willingness to limit and reduce its forces on deep cuts in the US and Russian arsenals; significantly, the United Kingdom and France did not subscribe to this condition, and each conducted reductions on its own. But China’s goalposts kept moving. In 1982, Beijing said it would join nuclear arms control talks only after the United States and the Soviet Union halted the testing, manufacture, and deployment of nuclear weapons, and reduced their arsenals by 50 percent. Then, in 1988, China modified its position, promising to join the arms control process not at the 50-percent mark but after further “drastic reductions” by the United States and Russia. In 1995, China stated that it would not adopt nuclear restraint measures unless the United States and Russia reduced their arsenals “far beyond” those envisioned by current arms control talks, abandoned tactical nuclear weapons and missile defenses, and agreed to a joint NFU pledge. Then came the “when-conditions-are-ripe” formulation, which is still standard language today.

Still, in Track 1.5 discussions, the Chinese shifted from complete disinterest in arms control to a willingness to discuss it and apparently to learn more about how it works and what it might involve. Discussion in the Track-1 revealed that the PLA had been tasked to study when it would be appropriate for China to join the United States and Russia in arms control negotiations. First of all, the Chinese outlined a number of prerequisites for their participation. As mentioned earlier, in addition to making deep cuts in US forces, the United States would have to acknowledge mutual vulnerability with China and declare an NFU policy.

China's interest, however, seemed genuine. They wanted to learn more about verification of compliance with arms control treaties and its applications. They even suggested that Chinese representatives be invited to observe US-Russia arms control negotiations and mock inspections to see how transparency and treaty monitoring were implemented and what they would entail.

In the 2016 dialogue, there seemed to be even more Chinese interest in arms control. The Chinese had a sense of urgency the US delegation had not seen before. They reported that the PLA had been tasked to find a force level to which the United States and Russia would have to reduce before China could enter into arms control negotiations.

The Chinese also maintained that if arms control negotiations were to be meaningful, they would have to include India, Pakistan, and Israel in addition to the P-5. They did not seem sensitive to the virtual certainty that insistence on a P-5+3 format would halt arms control in its tracks. Certainly, they must have appreciated that expanding participation to include so many more political, military, and technical variables would virtually guarantee failure or interminable delay.

The Chinese expressed concern that monitoring and verifying compliance with arms control treaties would be incompatible with China's firm stance against being more transparent, although for the first time they seemed willing to brainstorm about possible work-arounds on transparency. They felt especially disadvantaged when it came to "national technical means" (NTM) of monitoring compliance, acknowledging up front that they did not have a good understanding of NTM and that they wanted to learn more. They did, however, stress that they had considerable experience implementing multilateral arms control

treaties, notably the Comprehensive Nuclear Test Ban Treaty. The US delegation agreed that the Track-1.5 could help the Chinese become more conversant with these subjects.

It is worth noting that in earlier Track-1.5's the Chinese refused to acknowledge that there was anything to learn from the US-Soviet/Russia arms control experience. That process, in their view, was the product of passé "Cold War thinking" and they did not want arms control to become a "barometer" for overall US-China relations as it was for US-Soviet relations. This view mellowed somewhat as the Track-1.5 matured, but they always kept arms control—particularly matters related to China's involvement—at arms' length and ambiguous.

The Chinese also worried about the potential collapse of US-Russia arms control, the possibility that New START would not be extended, and that there would be no follow-on START treaty. If no progress were made on a START follow-on, US and Russian nuclear forces would once again be unconstrained. If in the absence of agreed limits, the United States and Russia began building up their forces, some Chinese participants stressed that China might have to follow suit.

The foundering US-Russia Intermediate-Range Nuclear Forces Treaty (INF) also affected China's strategic calculus. Without the INF Treaty, the United States could—political constraints aside—deploy intermediate-range missiles again, only this time for possible use against China or North Korea, in addition to Russian targets. Chinese participants admitted that these developments created incentives in Beijing to follow arms control more closely and become better acquainted with its technology and terminology.

Transparency

US participants found that China's lack of transparency was the single greatest impediment to more meaningful dialogue, and a two-way flow of information on strategic nuclear issues. Not long after the Track-1.5 began, it became clear that the Chinese delegations were not in a position to share much information about the size of their nuclear arsenal and what their plans were for the future. The Chinese insisted that, as the weaker power, greater transparency would be a strategic liability: It was not in their interest to divulge information about, for example, the size and composition of its nuclear arsenal and what it was projected to be, quantitatively and qualitatively, in 10-15 years.

Opacity, from a Chinese perspective, is a strategic asset because it increases an adversary's uncertainty about China's capability, what to target, and the likely number of targets. Their position was consistent with their NFU declaratory policy: NFU meant "going second" in a nuclear exchange. This put a premium on opacity and secrecy to help ensure that sufficient retaliatory forces survive the initial strike. The Chinese, therefore, cautioned that if the United States expected greater transparency it should prepare to be disappointed.

US reasoning was quite the opposite: greater transparency would be a strategic asset because it would lower the risks of misperception and miscalculation that could lead to confrontation, escalation, and conflict. Whereas the Chinese focused on preserving their retaliatory capability, the United States focused on avoiding uncertainty that could generate an arms race and increase the risk of strategic surprise.

Of note: The Chinese pointed out that China was transparent about its doctrine and policy,

just not about their numbers and capabilities and that they should get credit for that. They were also irked that they should be pressed for greater transparency: doing so had overtones of pushy impropriety. As one Chinese participant put it, "If you are invited to someone's house, you do not ask to see the bedroom and then look in the closets." They also admitted that their aversion to transparency could be attributed to Chinese culture.

US participants stressed that even the Soviet Union—not known for its openness in these matters—joined the INF Treaty, which was widely regarded as having the most intrusive of all arms control monitoring regimes. The Chinese would respond that Russia could afford to be more transparent because it was at nuclear parity with the United States. China, however, was nowhere near parity and, therefore, it needed greater opacity and ambiguity. In short, Beijing was willing to bear the elevated risk of misperception and miscalculation rather than risk any possibility of rendering its second-strike retaliatory force more vulnerable.

It is important to note that, over time, the Chinese did provide a considerable amount of information and insight about both their nuclear thinking *and* their nuclear forces. With the Track-1.5, plainly, US knowledge increased substantially. On some topics, however, there was virtually no comparable reciprocity, particularly on high technology subjects. On BMD, there was more of a US monologue than a dialogue, with the Chinese peppering US presenters with questions and demands for more technical information without offering much in other areas of special interest to US participants. US inquiries about Chinese BMD programs were deflected, with the Chinese stating simply that their BMD program was mainly about keeping abreast with technology.

In more recent years, several Chinese participants suggested that “structured verification,” e.g., in the context of a narrowly defined arms control arrangement, might be more acceptable to China than more general, free-form efforts at transparency or openness. For one thing, there might be fewer political ramifications in Beijing if China compromised on transparency in a trilateral US-Russia-China negotiation rather than as capitulation to bilateral US pressure. If this view finds traction in Beijing, it would be a remarkably positive development. At the very least, the Track-1.5 indicated that transparency, arms control, and verification were under discussion in China.

In early discussions on transparency, it became clear that the US and China were confronted with a classic “chicken-egg” problem: the Chinese insisted that before they could be more transparent about their nuclear weapons, there had to be more mutual trust between the two sides. The United States, on the other hand, explained that greater mutual trust should spring from greater transparency. China’s opacity caused many in the United States to suspect Beijing was not being straightforward—that it was hiding something significant. US participants noted that the United States (famously) did not trust the Russians during the Cold War, but even if it had trusted them verification would still have been necessary. “Trust but verify” was the mantra, suggesting that both trust and transparency could be accomplished simultaneously, not just sequentially, as suggested by China.

The fact that the Chinese gradually expressed less resistance to “structured verification” than broad-brush transparency suggested that US arguments in the Track-1.5 may have hit a responsive chord—and that the Chinese might, when the time is right, be willing to cooperate to find a practical “work-arounds”

for the transparency and verification challenges.

The general impression, though, was that transparency required much more work. Anyone hoping to convince the Chinese to be more open about their nuclear weapons and ballistic missile programs any time soon should, as the Chinese said, “prepare to be frustrated.” Experience suggests that China cannot be shamed into being more transparent with comparisons to the transparency of other nuclear weapon states. They were not troubled in the least, for instance, about being a P-5 outlier. That said, there were strong indications of interest and movement in the right direction. Future dialogues should encourage this welcome trend and seek ways to break down China’s reticence, perhaps with briefings and discussions of what “structured verification” might be and how it might work. Note: this assumes that verification would focus rather narrowly on agreed elements of a negotiated agreement or some other arrangement. Taken together, however, these elements might provide as much, if not more, relevant information than what one could get from more generalized transparency.

Nonproliferation

On nonproliferation, a key finding of the Track-1.5 was that the United States and China have common goals, but important differences as well. In a revealing statement in one of the early rounds of the Track-1.5, the Chinese confessed that nonproliferation was not a Chinese priority and that the Chinese Ministry of Foreign Affairs had only “three or four” people working the issue in Beijing. Proliferation, they said, was more of an American problem than a Chinese problem because US “interventionist” policies, threats, and sanctions made other countries feel insecure, which, in turn, caused

them to consider acquiring their own nuclear weapons capability.

Over the course of the dialogues, however, the Chinese began to pay more attention to nonproliferation—they said Beijing was putting more effort into the issue. Still, nonproliferation was treated as “important but not urgent,” and Chinese strategists continued to put much of the blame for proliferation on the United States. Beijing leaned more strongly in favor of diplomacy whereas Washington, they said, was too prone to impose sanctions and, in some cases, too quick to resort to force. Despite these important differences, however, the Chinese stressed that nonproliferation was ripe for discussion and more US-China cooperation.

The Chinese also claimed the United States used nonproliferation and counterproliferation as an excuse for taking actions against Chinese interests. Chinese engagement on nonproliferation, therefore, was viewed to be more about dealing with potentially destabilizing US responses or anticipated responses to proliferation than China dealing directly with proliferators themselves.

The United States, they argued, had to take Chinese interests more into account when it comes to proliferation. They insisted, for instance, that if the United States needs China’s help to pressure other countries to impose sanctions, then Washington should not also sanction Beijing. As one Chinese participant explained, “we have to tread carefully because supporting sanctions against North Korea could legitimize sanctioning China as well.”

Further on nonproliferation, the Chinese saw objectionable US “double standards” at work, especially where India and Israel (i.e., friends of the United States) were concerned. They complained that the NPT should

include all states possessing nuclear weapons, including India and Israel (with no mention of China’s nuclear ally, Pakistan). The US readiness to build a new strategic relationship with India despite New Delhi’s failure to join the NPT was a preeminent case in point.

The Chinese, however, attached little significance to the fact that North Korea and Iran joined the NPT and accepted international safeguards and associated legal commitments but then carried out secret activities for years in violation of these pledges. As far as the United States was concerned, Israel’s participation in the NPT framework would be welcome, but that was hardly likely to happen without a regional peace and Iran’s abandonment of its nuclear aspirations. For US participants, then, making distinctions between NPT and non-NPT signatories was critical; the Chinese, however, maintained that US policy writ large was based on unfair double standards that rewarded US friends at the expense of others. Some also viewed it as yet another manifestation of containment, especially, they said, where the United States turned a blind eye to India.

In recognition that there was a broader array of nonproliferation issues and potential cooperative projects to discuss, immediately after a side project sponsored by the US Department of Energy (DOE) intended to explore opportunities for US-China cooperation on nonproliferation and nuclear security, the Chinese suggested establishing a dedicated Track-1.5 working group on nonproliferation to enhance information sharing among China, other Asian countries, and the United States. Such a group would focus on improving nuclear forensic research and cooperation, addressing North Korean nuclear issues, and discussing emerging digital and cyber threats related to nonproliferation. This would include additive manufacturing, commonly referred to as 3D printing. Several Chinese strategists

have since continued to stress that it is still an effort worth pursuing.

North Korea

Because Pyongyang cited US “hostile policy” as a reason why it could not denuclearize, Beijing claimed, in line with its broader view of proliferation, that the North Korean nuclear problem was primarily a US problem, and to solve it Pyongyang had to be convinced that the United States was not a threat. The Chinese pressed for an integrated approach to address both the symptoms and root causes behind North Korea’s nuclear weapons program, which, in their view, was insecurity. They also pushed for more dialogue and diplomacy with fewer sanctions on the North. Some dismissed the idea that the North would ever relinquish its nuclear weapons after investing so much to get where it was. The best approach, from their perspective, was for the United States to conclude a peace treaty with Pyongyang and then try to cap, but not necessarily eliminate, its nuclear weapons program. Beijing preferred denuclearization but signaled that it would be content with a nuclear North Korea as long as it was not provocative and as long as the Korean Peninsula remained stable.

The Chinese made clear as well that they had no intention of exerting significantly more pressure on the North. They admitted that China could leverage North Korea to the “brink of collapse,” but dismissed this as the wrong way to go because it would only destabilize the Peninsula. They also said they would seek “regime transformation” rather than “regime change,” transformation being a gradual process involving diplomacy and economic incentives to bring North Korean leadership to realize that denuclearization was in their best interest. Seeking regime change, on the other hand, could easily turn kinetic with the North and, significantly,

carry with it a much greater risk of a US-China confrontation.

From a Chinese perspective, then, Beijing was doing all it could do. Nevertheless, the over-arching Chinese view was that North Korean nuclear weapons were here to stay. On the margins of the Track-1.5, however, on several occasions the Chinese complained that they also had to be wary of North Korea because Beijing did not want another nuclear “enemy” on its border.

In more recent dialogues, the Chinese reported growing exasperation in Beijing over Kim Jong Un. Nonetheless, they maintained that China had a strong interest in keeping a pro-China North Korea as a buffer against the US military presence in the ROK. Chinese interlocutors expressed frustration and anxiety over North Korea’s lack of cooperation and a strong desire to remain on its good side. Some went so far as to say China needed North Korea more than the North needed China. While this may have been true geopolitically—losing its North Korean buffer would be a major loss for Beijing—the North would remain almost completely dependent on China for its basic needs. So, China was more willing to risk coexistence with a nuclear-armed and unpredictable North Korea than it was willing to risk the instability and uncertainty associated with pushing the North to the brink and pressing for denuclearization and regime change.

From China’s vantage point, negotiations were the “only way to go.” Chinese participants outlined notional parameters for US-North Korea negotiations: a freeze on the North’s nuclear weapon program; no nuclear testing; no long-range missile tests or space vehicle launches; and no uranium enrichment or reprocessing of spent nuclear fuel—those being the two paths to nuclear weapons production; but also no disablement, dismantlement, or elimination

of North Korea's reprocessing and uranium enrichment facilities and no nuclear warhead elimination.

Of note: Chinese strategists have stressed in recent years that Beijing regards North Korea as a major problem for regional security. While they assessed the risk of onward proliferation by Pyongyang to be low, China is reportedly increasingly concerned that the North is prepared to use nuclear weapons as more than just political tools; that it may soon want to integrate their nuclear weapons in a strategic or operational plan, suggesting that they would be used as coercive tools in the region.

Iran

On Iran, according to Chinese interlocutors, China believed that Tehran was seeking nuclear capability but not the weapons themselves; so, again, it did not want to pursue regime change or maximum pressure by way of heavy sanctions. Chinese participants also pointed out that China relied very heavily on Iranian oil, so anything that interrupted or adversely affected Iranian oil sales to China—including heavy sanctions—was not in China's interest. They also felt that removal of Iran's uranium and reprocessing facilities, while desirable from a nonproliferation standpoint, was a lost cause, particularly as Japan and others already possessed such capability.

Despite the proliferation risks, then, China's proclivity was toward immediate self-interest and maintaining "stability" in the oil markets. Nowhere was this more evident as when they urged the US side to tell Washington to "reign in" Israel and keep it from attacking Iran. In Beijing's view, Iran was simply too critical a supplier for China to pressure strenuously.

On the Joint Comprehensive Plan of Action (JCPOA), the Chinese considered it a significant achievement, but they were concerned that it would disadvantage China by causing it to lose business and political influence with Iran. Now that the United States has withdrawn from the JCPOA, China also reportedly feels marginalized.

Nuclear Security

A key finding of the DOE side project was that while the United States and China often differ on nonproliferation, they do so much less on nuclear security. Building US-China nuclear security cooperation is much easier than building US-China nonproliferation cooperation.

While, as a general rule, Americans are more worried about nuclear terrorism than the Chinese, this gap in perceptions has narrowed considerably over time. Since the 2008 Beijing Olympic Games in particular, China has paid much greater attention to nuclear security. China's new nuclear security center of excellence, a US-China initiative which opened its doors in 2016, offers an important platform to help Chinese agencies meet training requirements and promote bilateral and regional good practice exchanges. One Chinese speaker in 2015 opined that China-US nuclear security cooperation was stronger than ever and that it had potential to be further strengthened in the aftermath of the Nuclear Security Summit process. More generally, Americans and Chinese agreed that there is an urgent need to strengthen cooperation to prevent and manage nuclear accidents and incidents. Still, it is unclear how long this generally positive outlook can be maintained if broader political-military relations continue to deteriorate. Significantly, for instance, US-China cooperation under the auspices of China's nuclear security center of excellence has now slowed down considerably.

CONCLUSIONS

The Track-1.5 “China-US Strategic Nuclear Dynamics Dialogue” has had mixed success. On the one hand, it failed to facilitate official strategic nuclear dialogue between the United States and China. It seemed that Beijing valued the Track-1.5 but regarded going to Track-1 as a step too far because it feared that China, as a weaker nuclear power, had too much to lose vis-à-vis the United States, a much stronger nuclear power. The US and Chinese sides also failed to agree on the contours of a *modus vivendi* to help reduce strategic instability in the bilateral relationship.

Yet, on the other hand, the Track-1.5 has *real* achievements under its belt. Substantively, the two sides now understand each other much better than they did before the dialogue began; mutual understanding is important, and it was a primary goal of the Track-1.5. Significantly, the Track-1.5 dialogue also helped build an epistemic community between US and Chinese strategists, including at very high levels, and these relationships will likely endure.

What does the future hold? The prospects appear rather bleak. The US-China relationship has deteriorated sharply in recent years, be it in the security, economics, technology, and governance domains. What’s more, the COVID-19 pandemic, which started in Wuhan, China in late 2019 and has since spread and caused immense health and economic challenges throughout the world, has brought the relationship to a new low point. All this is happening at a time when, in a very short period of time, China has become a much more powerful and confident power. The absence of nuclear dialogue in these circumstances is deeply concerning. The hope is that Washington and Beijing find a way to initiate dialogue and work to insulate their nuclear relationship from their broader, increasingly competitive, and at times even adversarial relationship.

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