

Reaching an Inflection Point? The Tenth China-US Dialogue on Strategic Nuclear Dynamics

US Perspectives

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China Foundation for International and Strategic Studies (CFISS)

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Key Findings 10th China-US Strategic Nuclear Dynamics Dialogue

Beijing, China - June 13-14, 2016

The Pacific Forum CSIS, with the China Foundation for International and Strategic Studies (CFISS), and with support from NPS/PASCC and the Defense Threat Reduction Agency, held the 10th China-US Strategic Nuclear Dynamics Dialogue in Beijing on June 13-14, 2016. More than 70 Chinese and US experts, officials, military officers, and observers met in their private capacities to discuss US-China strategic relations with an emphasis on its nuclear dimension. Our off-the-record discussions covered comparative assessments of military developments in the Asia-Pacific region and their implications for US-China strategic relations, the relationship of nuclear weapons and cyber and outer space, each country's relations with Russia and their effect on nuclear dynamics (in particular arms control), regional nuclear challenges, the role of nuclear and strategic capabilities in military alliances, and strategic stability and reassurance. Key findings from this meeting include:

The tone of the meeting was more positive than anticipated. Despite repeated references to tensions in US-China relations and a defense of China's actions in the South China Sea (SCS), most Chinese sought areas of agreement, avoided pointed criticism of US behavior, and eschewed the usual talking points. There was almost no mention of Xi Jinping pronouncements, the "new type of major country relations," Japan militarism, or Taiwan. There was effort to put ideas on the table and find solutions (albeit mostly aimed at reassuring China). The discussion on space and cyber focused on identifying areas of overlapping perspectives and opportunities to cooperate. A continuation of break-out sessions (this time on North Korea and Iran) permitted more focused discussion.

Chinese interlocutors seemed more comfortable this year using Strategic Stability as the organizing principle for the US-China relationship. Mutual vulnerability – an assured Chinese second-strike capability – remains an essential component. Discussion of "asymmetric strategic stability" suggested the Chinese have found some way to differentiate the term strategic stability from its (problematic) Cold War origins and were aimed at reassuring the US that China was not seeking parity.

Typically, Chinese interlocutors stressed that Strategic Stability can be interpreted two ways: broadly, to encompass the entire range of relations between the two countries, or narrowly, to just include its nuclear dimensions. Chinese colleagues stressed repeatedly that tensions in the broader relationship (read: South China Sea) could impact strategic stability, even though our nuclear relations currently remain stable, due to China's minimum deterrence policy.

Chinese participants worried about the prospect of increased US reliance on nuclear weapons if the regional conventional military balance shifted in China's favor. They also expressed concern that developments in Europe may lead the US to increase its reliance on nuclear weapons, indirectly impacting China. They worried the next US administration (regardless of who wins) would reverse the current US stated commitment toward reduced reliance on nuclear weapons.

Despite the cordial tone, many US questions (some longstanding) remain unanswered. The Chinese still can't/won't articulate a level or threshold at which China had "enough" nuclear weapons," a prerequisite for easing concerns about a "sprint to parity" by Beijing if the US and Russia continue arms control efforts, but did ask what assurances the US side seeks in this regard. The transparency discussion generally avoided old arguments and complaints.

While details regarding the ongoing reform of the People's Liberation Army remain sketchy, Chinese participants said its aim was to create a "much more capable fighting force" with parallel structures to the US (which should make cooperation easier). Several Chinese participants noted that Beijing will not remain passive in the face of US actions, which they increasingly view as attempts to contain China or undermine its re-rise. As one military expert noted, "if the rebalance is meant to alarm China, it has succeeded. If it is meant to engage and include China, it has not succeeded."

While Chinese interlocutors were not as insistent as in the past on the need for the US to adopt a No-First Use (NFU) policy, they repeatedly noted its advantages and floated the possibility of a bilateral China-US NFU pledge. They asserted that China-Russia relations are more stable than China-US relations because they have a bilateral NFU arrangement. Despite US insistence to the contrary, at least one Chinese reiterated that the absence of a US NFU policy was akin to a strategy for preventive nuclear war. Chinese discussion concerning Prompt Global Strike, THAAD, anti-submarine warfare (including unmanned systems), and nuclear force modernization reflected this assessment.

Generally speaking, Chinese participants voiced little concern about Russian behavior. There was no worry about Russia's violation of the Intermediate-Range Nuclear Forces Agreement (INF) as Chinese participants insisted that Russia's existing force structure could already threaten China and no additional weapons were needed. They dismissed concerns about the Russian embrace of 'escalate to de-escalate' within its military posture, arguing that the approach was primarily a logical fix to Russian conventional weakness, comparable to the US policy of 'flexible response' during the Cold War and argued it was a temporary policy shift, from 2001 to 2010. The discussion of the Russian view of "deescalating" was fairly sophisticated, differentiating between "a first limited use and a first strike" and highlighting challenges to credibility in such a tactic.

Throughout the discussion, on- and off-line, Chinese interlocutors evinced concern directly and indirectly about US missile defense and regarded it as a threat to strategic stability, although the threat seemed more political (tightening or integrating US alliances) than operational, although such concerns remain: one Chinese made indirect reference to the SMIII2a regional interceptor now in US-Japan co-development; we are sure to hear more about this in the future.

While the tone was generally polite, all denounced the planned deployment of THAAD to South Korea and disregarded US assurances about its potential impact on Chinese nuclear capabilities. When presented with unclassified technical specifics, the Chinese raised a range of follow-on questions suggesting that they have deeply analyzed the issue. They cited their own assessment of THAAD being capable of intercepting thousands of missiles in the future. They

expressed interest in the time interval the radar could detect initial burn stages of Chinese missiles, arguing the increased observation time would help refine U.S. Shared Early Warning. They asked if THAAD could be rapidly reoriented if employed in the forward deployed vice fire control mode and also inquired about the number of THAAD batteries needed to defend the ROK and how these systems would interoperate with ROK ballistic missile defenses.

Several Chinese participants argued that THAAD was foisted upon South Korea by Washington. US participants explained that Seoul's calculus had changed as a result of greater assertiveness by North Korea, Beijing's failure to rein in Pyongyang, and Beijing's own hardline diplomacy. On a more positive note, some Chinese proposed ways to enhance reassurance, suggesting that there may be room to alleviate Beijing's concerns (or even that they may be looking for a face-saving way to get beyond their stated objections). Our Chinese interlocutors left the meeting better informed about THAAD but remain unconvinced.

Chinese participants argued that they faced a difficult dilemma dealing with North Korea. While sanctions could eventually bring the North back to the negotiating table, this could take some time (two years being most frequently cited). In the interim, delaying engagement allowed Pyongyang to develop new nuclear and missile capabilities. Nonetheless, they insisted that Beijing was prepared to strictly enforce sanctions and to "bring the DPRK to the brink of collapse," but asked "what then?" The hope was that Pyongyang, when faced with a hard choice between economic development and continued development of nuclear weapons, would be compelled to finally agree to put denuclearization on the table, but creating another crisis was the anticipated first response.

While patience with the Kim Jong Un regime is clearly wearing thin, the Chinese have not yet fully taken on board the "game-changing" impact an operational North Korean nuclear warhead-equipped ballistic missile would have on Washington's strategic calculus. Some Chinese participants argued that Chinese support for UNSCR 2270 should yield US concessions on issues that are important to Beijing, such as SCS disputes. US participants stressed the DPRK denuclearization was also in China's interest and that quid pro quos were neither necessary nor appropriate.

Of note, several Chinese suggested that Six-Party Talks participants resume negotiations on the basis of the Sept. 19, 2005 Joint Statement. If "all parties" were not ready to accept that statement, a seat at the table should be left for Pyongyang but the talks should proceed without the DPRK; this was a significant change from previous Chinese reactions to five-party dialogue proposals. Chinese interlocutors continued to promote their "dual approach" to dialogue, involving simultaneous discussions on denuclearization and a peace accord (involving the DPRK and ROK plus China and the US).

On Iran, both sides were largely on the same page, arguing that the nuclear deal was a significant achievement that would help manage the Iranian nuclear situation going forward, but that managing the deal narrowly as well as the broader opportunities it provides would require proactive action by all parties. Chinese participants made two provocative comments. First, they noted that some non-governmental Chinese analysts have argued the deal actually disadvantages China, since it will lose business and political influence in Iran as the deal opens doors for

others. Second, they stated that in the aftermath of the deal China had felt marginalized, although they were not specific about why they felt marginalized and what the United States might have done, or might do now, to address the issue.

There is still little clarity or consensus on either side about the impact of cross-domain operations on strategic stability and deterrence. While there is broad agreement that cyber and space attacks on command and control facilities could be seen as an indication of a strategic attack, there is no consensus on where the threshold is or what constitutes an appropriate response. Still, there was a shared and more nuanced view of the role of cyber. Both sides saw some degree of cyber (or more broadly, electronic) warfare as increasingly integrated in operations. But how easily we might separate a set of more escalatory options was more problematic (for both sides). More generally, both sides would benefit from determining how combining cyber and space assets with other conventional capabilities might impact strategic stability.

Despite a decade of attempts by the US to explain the meaning, purpose, and content of extended deterrence (ExD) commitments, Chinese interlocutors remain troubled by the concept and its implementation. While more nuanced (and less combative), they still fear that ExD targets China and worry that it emboldens countries under the nuclear umbrella to take risks and challenge China. Moreover, Chinese seem to equate ExD exclusively with nuclear responses (overlooking the conventional force dimension) and at times seemed to associate ExD with the deployment and use of tactical nuclear weapons, while inquiring if/how ExD applied to "grey zone" conflicts.

Throughout the meeting, Chinese participants made concrete suggestions as to how the US could reassure China; the US could invite Chinese officials to inspect an operational THAAD battery or share radar data, or refrain from developing and deploying antisubmarine warfare systems that would put at risk Chinese strategic naval assets. Yet the Chinese did not appear reassured by steps taken by US delegates to address previous concerns, remained generally unreceptive to offers for track one technical briefings, and offered few if any suggestions as to how China could and should reassure the US.

Next steps: We remain hopeful that we can continue to build on this Track 1.5 process to help move the overall strategic relationship in the cooperative direction that both countries affirm is their goal. A working draft focused on nuclear, space, and cyber capabilities, their interactions, and implications for strategic stability was circulated at the end of the meeting as an initial effort to draft a joint statement on 'rules of the road' prior to our next meeting. An informal working group is also being created focused on Korean Peninsula crisis management, to identify common objectives and a possible shared vision. The Chinese side seemed slightly more optimistic regarding eventual track one dialogue and continues to see this dialogue as fueling that process. The next meeting is tentatively planned for early 2017, with a focus on recommendations for the incoming US administration.

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Conference Report 10th China-US Strategic Nuclear Dynamics Dialogue

Beijing, China – June 13-14, 2016

The US-China relationship is approaching an inflection point. The "ordinary" tensions of regional diplomacy have been exacerbated by a purported shift in the regional balance of power. China's rise and a perception of US decline frame regional thinking about security and create a dynamic of their own. Yet the US-China relationship is global as well as regional, which means that Washington and Beijing see each other as rivals and partners across an expanding array of issues and concerns. Central to that relationship is the balance struck by the two nuclear forces, one labeled "strategic stability" in the US lexicon and which the Chinese insist with growing fervor be equated with "mutual vulnerability." The impending (or at least anticipated) modernization of the US nuclear deterrent has driven many Chinese to question the durability of strategic stability and ask whether the US is giving up on mutual vulnerability.

This is the context in which the Pacific Forum CSIS and the China Foundation for International and Strategic Studies (CFISS) with support from NPS/PASCC and the Defense Threat Reduction Agency, convened the 10th China-US Strategic Nuclear Dynamics Dialogue in Beijing on June 13-14, 2016. More than 70 Chinese and US experts, officials, military officers, and observers met in their private capacities to discuss US-China strategic relations with an emphasis on its nuclear dimension. The wide-ranging discussion continued the candid, frank, and sometimes frustrating but mostly productive exchanges of the last decade. There is a growing sense that US-China strategic relations are increasingly complex and that the laissez-faire approach that has been applied to expert and official discussions is no longer enough. There needs to be a systematic and greater integration of official and nonofficial dialogues on these issues and governments must claim the initiative on talks about strategic concerns.

Military developments

The United States continues to modernize its Asia policy. At the broadest level, Washington continues the rebalance, emphasizing other components of its foreign policy toolbox – "whole of government" (WOG) is the shorthand for this approach – as it engages the region, and countering any doubts about the credibility and durability of the US commitment to Asia. The US is pursuing a "third offset strategy" and the acquisition of conventional capabilities to make it real. This project is complemented by the call for a "principled security network," a multilateral construct articulated and pushed by Secretary of Defense Ashton Carter; it is supplemented by initiatives to build capacity among allies and partners, such as the Maritime Security Initiative. Weapons modernization and procurement programs continue, with emphasis placed on high-speed strike weaponry, lasers, and electromagnetic railguns. (Nuclear and other strategic weapons will be taken up in the next section.)

Meanwhile, China presses ahead with its own military modernization and procurement efforts, and US observers continue to complain about the opacity of those programs, noting that a lack of transparency fuels doubts about intentions. Modernization has taken on a new dimension with the extensive reform of the People's Liberation Army that was announced in November 2013. The first elements were made public in September 2015, and implementation is expected

to last until 2020. (The reforms directly impacted the Strategic Dialogue; our meeting was originally scheduled for March 2016 and was pushed back to allow the dust to settle.) These efforts will yield a more capable joint force, although there are considerable challenges to be overcome. While it is too early to see the fruits of this project, there is no missing the new tactics in recent encounters between China and its regional rivals and disputants: China relies increasingly on law enforcement vessels rather than naval ones for gray zone challenges that assert its claims to disputed territory, a move that manages to ratchet up tension despite – or perhaps because – it is not as overtly aggressive.

Mutual modernization efforts have contributed to negative perceptions of each country's intent. Chinese strategists (and the public), our US presenter asserted, believe that the US "is singularly focused on targeting, constraining, and hedging against China" and all its actions are escalatory. In contrast, he argued that Americans "see Chinese actions as a challenge to the US-led security order and China fails to acknowledge the contribution that order has made to regional peace." The result has been an action/reaction cycle of developments in the first island chain that, while troubling, is not spiraling out of control. Some of the credit for this restraint reflects the maturation of military to military relations and a continuing suite of activities and conversations that afford some transparency into the thinking of both militaries and build confidence. "Tensions are not the whole story," our US speaker reminded the group.

Most significantly, changes have not yet affected the bilateral nuclear relationship (although there are growing fears that they eventually will). Tensions in the South China Sea, while the most prominent and thus most troubling, remain bounded. There are no questions as yet about the viability of each country's deterrent. Still, the development of conventional weaponry that shortens the escalation time line is worrisome, as is a lack of clarity about the prospect of and potential for escalation in nonnuclear domains, such as cyber- and outer space. The development of new weapons and systems here has the potential to disrupt strategic stability.

In an attempt to dispel Chinese concerns about one possible disruption, our discussion featured a detailed presentation on the Terminal High Altitude Aerial Defense (THAAD) system that South Korea has agreed to deploy to protect against the North Korean missile threat. China has insisted – like Russia in the face of similar deployments in Europe – that this system constitutes a threat to the survivability of its nuclear forces, and hence its deterrent, dismissing the claim that South Korea needs this system to counter North Korea missiles and nuclear weapons. US assurances that Chinese fears are unfounded and ROK worries are real have fallen on deaf ears; attempts to provide detailed presentations on the capabilities of THAAD at the official level have been rebuffed. At the request of the National Security Council, a presentation was included in this year's dialogue. The presenter concluded that THAAD offers an unambiguous benefit to South Korea; that it could not intercept Chinese ICBMs and provided only a very brief – tens of seconds with the widest possible radar profile – window of visibility on Chinese missile launches; that it could enhance US missile defense capabilities, but only marginally and only if the radars were redirected away from the North Korean threat; that its data is not better than that from other sources; and finally, that it provides no decisive improvement to US architecture or sensing capabilities vis-à-vis China.

Modernization notwithstanding, Chinese participants insisted that their country's military policy is marked more by continuity than change. Military strength is a tool and a symbol – it safeguards core interests and ensures the transition to a strong and prosperous country, while representing the realization of "the China dream." Yet as China and its military evolve, strategy remains constant. Strength is needed to reject hegemony. Nuclear weapons are for deterrence. Strategic forces are fundamentally defensive and the military will refrain from provocative or pre-emptive acts. There is no need for power projection, except to protect Chinese assets abroad. When China does act to safeguard distant assets, our Chinese speaker reassured us, it will do so in a cooperative manner, working with other countries in noncombatant evacuation operations, search and rescue operations, and to protect sea lines of communication. China has no intention of challenging the strong military position of the United States, but Beijing aims to maintain a balance of power to protect strategic stability. In this world, our Chinese presenter suggested, PLA missions include the prevention of crises, the deterrence of war, and winning wars if they do occur.

This thinking has implications for US-China relations. It means that wars will be local, high-intensity conflicts that are most likely to be fought on the seas on China's periphery. While the US is unlikely to be directly involved, Washington's credibility may well be at stake, along with that of the order it has constructed in the region. Thus, our Chinese presenter warned, "there is an increased risk of crisis."

The PLA reform effort that is underway is the most extensive since 1949 and will be "more profound than Goldwater-Nichols." The Central Military Commission still leads the PLA and directly reports to the chairman (currently Xi Jinping). Five joint theater commands replace the previous seven regional commands and all services now have equal status (which is, to outside observers, an effective demotion of the army.) The Second Artillery, which controlled China's nuclear and conventional missile forces, is now a separate service called the Rocket Force. Overall PLA personnel will be reduced by 300,000, or 13 percent, and new regulatory systems are being introduced to reduce corruption. The reforms are intended to create a wider spectrum of options – as part of a whole of government approach – to defend Chinese interests. While our presenter was not sure about the potential impact of these changes on strategic stability, "China will have a much more capable fighting force."

That is a potentially ominous development given China's "increased concern about the US threat." As our Chinese speaker explained, "if the rebalance is meant to alarm China, it has succeeded. If it is meant to engage and include China, then it has not succeeded." Defense Secretary Carter's May 2016 speech to graduates of the Naval Academy "shocked" some Chinese, although reviews of his Shangri-La Dialogue speech were more positive. As they assess the tone of US remarks, Chinese analysts do not detect conflict over bilateral interests – the US is not directly involved in the territorial disputes – but geostrategic competition. In Chinese eyes, US concern over Chinese land reclamation activities in the South China Sea is "overplayed" and the Coast Guard's assertiveness "exaggerated." Many Chinese consider US criticisms hypocritical, given Washington's refusal to ratify the United Nations Conference on the Law of the Sea.

The bulk of our discussion focused on THAAD, its origins, and the impact of its deployment. Put simply, the Chinese believe that the US forced THAAD on the South Koreans; that it is of little value in defending the ROK against North Korea; and that it has the potential to cover large swathes of Chinese territory and thus threatens its deterrent. South Korea may have reluctantly accepted THAAD, but the US was not to blame; instead the driving force behind that decision was a worsening North Korean threat and frustration with China's inability to change Pyongyang's thinking (not to mention Chinese public bullying, which the ROK strongly rejected). Simple numbers undermine the claim that THAAD could defend against thousands of missiles: each battery has only 48-72 missiles and while it can restock, each intercept costs \$10 million. "North Korea will always have more offensive missiles than the THAAD system." Chinese complained that a deeper look into China afforded by THAAD could help refine US Shared Early Warning. While US experts conceded that the THAAD radar can provide some visibility into China, it is of limited duration and of still more limited value: even a "longer look" at a Chinese launch offers no information about the warheads or the bus that is carrying them. Nevertheless, the Chinese fear that deployment of THAAD could escalate an arms race in Northeast Asia may come true – but only if China makes it so. US participants also warned that the failure to deploy adequate defenses could spur South Korea to strengthen its ability to strike and disarm the North, a move that could be even more destabilizing.

Questions from Chinese participants – particularly regarding the time to reorient the system from forward deployed to fire control mode – evidenced close study and analysis of the THAAD system, even though they refused to accept US claims – unclassified technical details – about the system's impact. It was not clear in our discussions, however, if the primary Chinese concern is the THAAD system's actual capability or its symbolism: Seoul's decision to deploy is a rejection of Beijing and an unambiguous choice to more deeply integrate security policy with the US. In other words, THAAD is largely a political, not a technical, problem.

Fortunately, there were suggestions on ways to reduce concerns about the deployment. For example, there could be joint inspections to ensure that THAAD radars were not aimed at China. Alternatively, the US could share radar data to build Chinese confidence about its target.

Nestled beneath this discussion was a deeper concern: that the US is not wedded to the concept of strategic stability. Chinese see the THAAD deployment, as well as close-range reconnaissance of Hainan and its increasing presence in the South China Sea as a threat to their strategic systems. The most bellicose Chinese participant warned that recent US actions and statements "sound like declarations of a new Cold War by the US" and are "very, very dangerous." When challenged about the impact of the reorganization of the PLA – in particular the elevation of the rocket forces – on strategic stability, Chinese participants conceded it was "too early to tell," but insisted the aim was to create a strategic command similar to that of the US. It was also asserted that the development of structures that parallel those of the US military could facilitate bilateral cooperation.

Nuclear weapons and space and cyber capabilities

Our focus then narrowed to nuclear and other strategic capabilities – space and cyber systems. Our Chinese presenter complained that no single principle is accepted by both sides to

frame their bilateral nuclear relationship. China promotes no first use (NFU) as the governing principle, which the US rejects. The US has offered strategic stability as the operative principle, but Chinese complain that there is no consensus about the meaning and application of that concept. From a Chinese perspective, the US "seems to think transparency equates with strategic stability," while in fact it is only a means to an end.

When discussion of strategic systems broadens to take on new dimensions, the confusion is compounded. Both countries increasingly rely on outer space as a domain critical to national security and prosperity and neither is confident that the existing regulatory and normative order provides sufficient protection to that infrastructure. As a result, both worry about how space assets will be treated in the event of conflict.

Cyber security is more complicated still. Our Chinese speaker suggested that the most appropriate analogy is biosecurity, given the possibility of small attacks such as viruses that do not cross a threshold or violate a taboo. As a result, Chinese thinkers are not confident that concepts like nuclear deterrence work for cyberspace.

Many US experts would agree. There is little confidence in the portability of concepts across domains, and while attacks on all three could have a strategic impact, there is no guarantee or assurance of such a result. In other words, there is a potential for gray zone challenges in outer space and cyberspace; those, our US speaker suggested, would impact capabilities rather than create mass casualties. If conventional military forces were to be affected, then, he argued, the appropriate focus is deterrence by punishment rather than deterrence by denial.

Cyber attacks pose particular problems. It is easy – relative to other domains – to acquire cyber capabilities, and difficult to determine intent, impact, or origin of attacks. Attribution is challenging – but not impossible. While it is generally believed that the use of cyber capabilities would not constitute a deterrent equivalent to that of nuclear systems, the degradation of cyber and space systems could undermine nuclear capabilities, increasing the sense of vulnerability and inclination to launch a first strike.

This quick summary has profound implications for arms control – most significantly, that the lessons we have learned to date don't apply to these new domains. Low barriers to entry mean that proliferation is impossible to prevent. The binary all-or-nothing model – which lends itself to "taboos" – is no longer applicable. Some use of those weapons can be tolerated and should be expected – which renders international monitoring difficult and norms hard to create and enforce. Deterrence in such a world is nearly impossible; tit for tat responses are unlikely to impose sufficient costs or could be too escalatory. Our US speaker suggested that cross-domain responses may be the only effective tool to deter, and US policy has adopted this position.

In this environment, both sides must promote clarity and transparency of their thinking about these domains. Each side must well understand what the other considers harmful and justifies retaliation. They should distinguish between economic and national security interests. They need to develop common principles regarding the use and development of capabilities and articulate an understanding or develop principles on attribution. To that end, the two

governments should resume their discussions on cyberspace and develop confidence building measures – cooperation on common threats, cybercrime, and the activity of nonstate actors could be fruitful. In outer space, the two governments could try to develop ways to deal with asteroids or space debris.

The discussion that followed centered on one question: should we consider nuclear and nonnuclear systems as a single domain or should they be disaggregated when we think about deterrence? The room was divided. The official US position is that all capabilities should be integrated into a single US deterrence posture. This should not, however, be interpreted as an attempt to lower the threshold for nuclear use. Rather, it is an attempt to force US adversaries to clearly understand the implications of their actions, especially in a time of crisis. As one US participant explained, an attack on US command and control would be considered an attack on strategic systems -- even though another US participant cautioned that such a strike would not automatically trigger a nuclear response. (Another US participant noted that even a nuclear attack would not automatically trigger a nuclear response.)

The assertion that a cyber attack could trigger a nuclear response "shocked" some Chinese; for them, the nuclear domain is unique and inviolable except by another nuclear strike. Moreover, the increasing centrality of networks to warfighting, the relative ease with which a cyber attack can be launched, and the "need" to infiltrate cyber systems in peacetime to test capabilities makes the US logic alarming. Uncertainty surrounding the intent behind such probes and the inability to determine the source of such attacks magnifies the possibility of a mistake. It is vital, they therefore insisted, to distinguish between nuclear, cyber, and space systems and several Chinese participants actually "opposed" a discussion of cross-domain capabilities, arguing that it would only confuse and obscure nuclear issues. In short, Chinese appear wedded to the idea that the nuclear domain is unique, primarily because of the destruction that would follow from nuclear use. (In fact, some cyber attacks could create more devastation and have a larger impact than would nuclear use. The key point, however, is that while nuclear weapons have a unique impact, they are designed to be used in combination with other capabilities at lower thresholds of conflict. It is the interplay of these capabilities that is the focus of our concern.) A small minority of Americans concurred with the broad contours of the Chinese position, arguing that it is stabilizing to isolate the domains.

There was broad agreement that cyber and space attacks on command and control facilities (and perhaps large critical infrastructure) could signal a strategic strike, but there was no consensus on where the threshold is or the appropriate response. Clarification of each nation's strategic priorities is critical, although there was the usual concern that articulating red lines invited adversaries to walk up to them.

It is important to differentiate between space and cyber systems. As a US participant explained, the traditional principles of nuclear deterrence may apply to some space systems, but not all: secret satellites, capabilities that are redundant, or those the damage to which can be contained are not governed by the binary, all or nothing logic of nuclear systems. This thinking troubled some participants because it could encourage probes or strikes that risk unintended or unforeseen escalation. Strikes on cyber or outer space systems could escalate to conventional conflict which could lead to nuclear war. This is especially worrisome given two Chinese beliefs:

first, that the US is more dependent on its satellites for its ability to fight than is China, and second, that "generally speaking, the US is on the offensive and China is on the defensive." This, warned a US participant, is "a very dangerous approach."

US-Russia relations, China-Russia relations, and their implications for proliferation, nonproliferation and disarmament

For much of the history of this dialogue, discussions focused on US-China strategic relations, with third parties figuring only on the margins: states like North Korea, Iran, and Pakistan entered the conversation only insofar as Washington and Beijing tried to find common ground in their approaches and policies. Until two years ago, Beijing routinely rebuffed any effort to ascertain how third countries, such as India or Russia, figured in its strategic calculus. In recent years, that reluctance to expand our bandwidth has eroded, and this year we devoted an entire session to the role that Russia played in each country's strategic thinking.

Our US speaker – and virtually every US participant – had little positive to say about the future of US-Russia bilateral relations. President Vladimir Putin has embraced an increasingly hard line in the pursuit of Russia's great power interests, and the US-Russia relationship has become increasingly contentious, if not combative, as a result. While the two governments worked together to forge a deal with Iran over that country's nuclear program, other issues such as Syria, Ukraine, and NATO's deployment of missile defense systems, have contributed to the deterioration of relations. It is too late in the Obama term to restore some equilibrium, and it will take a new administration at least a year to find its footing. Charges that Russia has violated the intermediate range nuclear forces (INF) agreement – and Moscow's disinterest in resolving the problem – render progress in the bilateral relationship in the US politically impossible. From Russia's perspective, the US decision to proceed with missile defense deployments in Europe poses equally insurmountable obstacles.

Nevertheless, some in the US – including our speaker – believe that Russia has an incentive to pursue serious negotiations before the New START agreement runs its course. New START is set to expire in 2021, but it can be extended for five years if both sides agree. Our speaker argued that Russia has an interest in legal constraints on the US given the American capacity to breakout. Other US participants challenged that logic, suggesting that the historic Russian interest in arms control is declining as Moscow modernizes its delivery systems. Contributing to this mindset is generational change in Moscow; younger decisionmakers worry less about the impact of war, including nuclear use. More important to them is the belief that the US exploited Russian weakness during the 1990s arms control negotiations. As a result, many Russians say arms control is dead and there is no prospect of its revival in Europe.

Americans urged Chinese counterparts to take this prospect seriously and to recognize its potential impact on China's strategic calculus. The loosening of INF constraints could change the balance of forces between Beijing and Moscow. Arms talks create transparency, grow confidence, and advance strategic stability; logically, all three are reduced if talks do not occur. And even though China may be sanguine about growing US-Russia tensions, Beijing should recognize that Russia's military modernization and new deployments will have an impact *tous azimuts*.

Central to our discussion was Russia's doctrine of "escalating to de-escalate," by which Moscow would use nuclear weapons to dramatically escalate a conflict to convey to an adversary – usually thought to be the United States, though possibly China – that further advances against Russia would incur punishing nuclear retaliation. In theory – and according to Russia's 2014 Military Doctrine – this would be invoked only when vital national interests, such as the existence of the state, are threatened. Statements surrounding this doctrine are ambiguous – likely deliberately so – but it should not be viewed as a bluff. US strategists worry that Russia is attempting to create the perception that its leaders are ready to use nuclear weapons -- and not as a last resort.

Chinese participants were less concerned with Russia doctrine. The formulation for nuclear use articulated in Russia's 1997 National Security Concept, set a high threshold for nuclear use — when the existence of the state is threatened. That threshold may have been reduced in 2000, but Chinese insist it was restored in 2010. The oscillation in doctrine reflected larger changes in the regional balance of power. NATO expansion, the war in Kosovo and sense of growing weakness in its conventional power forced Moscow to rethink nuclear doctrine, but this was, opined our Chinese presenter, a stopgap measure until Russia regained confidence in its military machine. Moreover, Chinese strategists see a difference in emphasis: Americans focus on the "escalation" component of the doctrine, while Chinese instead hone in on "de-escalate." This is consistent with the Chinese belief that it is impossible to fight a nuclear war; therefore "the reference to escalation is just a warning" explained our Chinese presenter. Chinese equate Russia's strategy with NATO's flexible response, which retains the nuclear option in the event of a conventional conflict. But as long as there is strategic stability, Russia retains a credible retaliatory capability and there is no motive for a first strike.

Discussion explored two areas. The first was China's thinking about Russia and its bilateral relationship with Moscow. Echoing the Chinese presenter, other Chinese participants expressed little concern about Russian nuclear policy. They agreed that nuclear weapons claim a shrinking role in Moscow's military doctrine, and changes in declared policy reflect shifts in the conventional balance. Russia is challenging the INF regime because it needs to test weapons – Chinese participants evinced no concern over US charges that Moscow is cheating – and dismissed the applicability of the INF to their strategic concerns (or those of Asia more generally), and, concomitantly, the idea that China might become a party to the INF treaty. Strategic stability between Russia and China is strong – stronger than that between the US and China, argued Chinese – because those two countries enjoy a better political relationship and as a result of the reassurance that is codified in their mutual no first use (NFU) agreement. This was one of the more subtle calls for US adoption of an NFU policy (or at least a bilateral China-US NFU pledge) that we have heard throughout our decade of discussions.

Americans rejected Chinese logic. US participants see a Russian "re-infatuation" with nuclear weapons and worry that the concept of "existential threats" (which cross the nuclear threshold) is too elastic. As one US participant explained, "Putin wants to put nuclear weapons back at the center of Russian military strategy." Decision makers in Moscow are not strategists; instead they are – or are directed by –spies who believe the West is weak and that Russia can use nuclear weapons and get away with it. Especially worrisome is the charge that "Russians and Americans no longer speak in the language of reassurance or restraint." The US has tried dozens

of times to assure Russia on its missile defense plans for Europe and none was accepted. "Complaint is more useful to Moscow." One challenge the US and China could take up is trying to convince Russia of the futility of using nuclear weapons. Reassessments of nuclear crisis, such as the Cuban Missile Crisis or the Able Archer crisis of 1983, is one avenue, as is an exploration of the P5 nations of their perceptions of the utility of nuclear weapons.

Our discussion also explored reassurance in the US-China context. Chinese now acknowledge US concerns about a Chinese "sprint to parity" if US warhead levels dropped below 1,000; one participant asked what China could do to assuage those fears. Unfortunately, the reassurance that is required is not a statement so much as an official dialogue process that would signal a more normal nuclear relationship. In its absence, statements even in forums such as this will ring hollow. The Chinese rejoinder is that the mistrust in the US-China relationship reflects US actions, not those of China. As one Chinese speaker admonished, "US modernization is designed to gain advantage on every step of the escalation ladder." Chinese experts see in recent US writings indications that the US is again preparing to use nuclear weapons below the strategic threshold: they believe this is possible in both Asia, as China's conventional capabilities improve, and in Europe, where a shifting balance of power in Europe in Russia's favor could tempt the US to reintroduce nuclear weapons into the tactical mix, a decision that could spill back over into China. US participants pushed back, distinguishing between such theorizing and official US policy. No US officials talk about "strengthening US nuclear warfighting capabilities" and current US nuclear programs aim to either modernize or retire weapons. Ultimately, explained one US participant, it is hard to see any circumstance in which nuclear weapons are the remedy to a perceived imbalance in the alignment of forces. Americans don't believe that Russians share that logic. Chinese fear that such thinking may not survive the Obama administration and its successor will reverse the longstanding policy to reduce the US reliance on nuclear weapons.

Breakout sessions

As in previous meetings, we broke into two groups to look in more depth at specific issues. One session tackled *Iran* and respective perceptions of the agreement hammered out by it and the P5+1 (Britain China, France, Russia, the United States and German) which capped Tehran's nuclear ambitions and provided a blueprint for Iran's international rehabilitation.

There was consensus among all participants that the deal was a significant achievement, although its success is by no means assured. The agreement has bought time, normalized Iran's relations with the West, and strengthened nonproliferation norms. Long-term success will depend on all parties, but especially the US and Iran, honoring not only the letter of the agreement but its spirit. Domestic politics in Washington and Tehran will weigh heavily on implementation. In this environment, much will be made of each country's intentions. Assessments of the agreement provided another demonstration of differences in the US and Chinese approach: US experts focused on technical details, while Chinese analysis used the "big picture" – the overall political relationship between the US and Iran – as a frame. Chinese participants suggested that China has been disadvantaged by the agreement since Beijing will lose business and political influence as Iran resumes ties with the West shut off by sanctions.

There were also vague complaints that China had been marginalized as a result of the deal, but little precision about what the problem was or how it could be fixed.

The second group tackled the thorny topic of *North Korea*, an issue that has consumed the bilateral relationship – and this dialogue – for years. Here too there was agreement that North Korea cannot be accepted as a nuclear weapons state, and even Chinese participants voiced considerable impatience with the Pyongyang government. Chinese participants were supportive of efforts to use sanctions to bring the North to the negotiating table but they worry that time is on the North's side. While there is agreement on the goal of forcing the North to choose between its economy and its nuclear programs, there were no good ideas about how to reconcile the growing tensions stemming from the pain inflicted by international sanctions and North Korea's improving military and nuclear capabilities. Generally, Chinese participants implied – although one speaker was blunt – that insufficient energy has been devoted to this issue.

There was similar confusion about what could be accomplished if the North returned to the negotiating table. Chinese expressed "little confidence" that Pyongyang could be persuaded to give up its nuclear programs; Americans were uniformly agreed that it would not happen. It appears as though Pyongyang seeks to follow the example of India and Pakistan and win reluctant recognition of its nuclear status. In Chinese eyes, the only way to achieve a positive outcome is to create a relationship between Washington and Pyongyang that gives North Korea assurance that peaceful co-existence – with the US and South Korea – is an option. (Once again, strategic stability is the answer.) Yet even the means for getting the North to the table proved divisive. Chinese participants pressed the North Korean line that conclusion of a US-DPRK peace treaty is key to resolving the dispute. They challenged the US to change its approach: Washington should abandon its call for denuclearization before talks can proceed and instead offer the peace treaty that the North desires. For Americans, a treaty is possible, but only at the culmination of a diplomatic process, not the beginning, and South Korea would have to be intimately involved in (if not leading) those talks.

The Chinese position on sanctions at our meeting broke new ground. Chinese participants acknowledged the need to put the screws to Pyongyang, stating Beijing was prepared to bring the DPRK "to the brink of collapse" (but not over the brink). One participant argued that "Sanctions could deal a fatal blow to the DPRK." While implying that, if truly faced with a choice between denuclearization and economic collapse, Pyongyang would opt for the latter; the problem was it could take "several years" to get to this point, even if sanctions were strictly enforced. For the first time, Chinese participants called for a resumption of the Six-Party Talks on the condition that all participants reaffirm their commitment to the Sept. 19, 2005 joint statement that called for denuclearization. Governments that did not make that pledge would not be included. In other words, for the first time China seemed ready to proceed with talks without Pyongyang.

While pressing the US to do more to engage the North, Chinese participants evinced concern about being marginalized in this process, even though they believe that their country would be hardest hit by developments on the Korean Peninsula. Chinese concerns include a refugee crisis or a nuclear accident the fallout from which lands on Chinese territory. These dangers open the door to various forms of US-China cooperation. It was suggested that the two countries work on a joint assessment of objectives under various crisis scenarios, with removal

of weapons of mass destruction being a top priority; that Washington and Beijing help Pyongyang develop a stronger culture of nuclear safety and security; and most importantly, that they ensure that North Korea does not proliferate nuclear technology or know how.

While Chinese thinking about the Korean Peninsula appears to be evolving, there are three important lacunae in this logic. The first is the conspicuous absence of South Korea in the discussion. Chinese participants had little interest in the ROK role or how Seoul assessed these issues, apart from the suggestion that the US and China should safeguard any deal stuck by the two Koreas. (This could reflect the belief, also evident in the THAAD debate, that Seoul is not a fully-fledged participant in this process, and the US has more influence over outcomes; US participants tried to disabuse Chinese participants of this thinking.) In fact, the ROK's role is increasing as Seoul's tolerance for North Korean provocations diminishes. No deal with Pyongyang can ignore or marginalize South Korea.

The second is the failure to grasp the enormity of the consequences if the North is pushed to the brink of collapse. There is little sense of how a crisis will shake the entire peninsula and create opportunities (at least in South Korean and US eyes; these are considered dangers by many Chinese) or risks for the political status quo. Chinese seem to think that it will be business as usual with some adjustments.

Third, there was no indication that the Chinese understood how significant the development of an operational nuclear-tipped ballistic missile by North Korea would be for the US. This would have a profound impact on the US strategic calculus – a "game changer" in the words of one US participant – and Beijing does not seem to appreciate the ramifications.

Finally, and especially worrying, it seems that Chinese logic when dealing with North Korea is transactional. Chinese participants argued that cooperation in these situations would entail tradeoffs or concessions on other issues that are of importance to Beijing, such as the South China Sea, Taiwan, or relations with US allies. US participants countered that this was the wrong approach: China would be expected to deal with North Korea because it is in Beijing's interest to do so. Quid pro quos are neither necessary nor appropriate.

Nuclear weapons and alliances

Another topic that this dialogue has grappled with since its inception is extended deterrence (ED). Yet after a decade of discussion, ED continues to confound many Chinese and poses fundamental problems for the US-China strategic relationship. US participants underscore that the primary purpose of ED is to deter adversaries and assure allies. Today, allies are demanding renewed assurance from the US as regional adversaries demonstrate new capabilities and the seeming desire to rewrite the status quo. In this environment, ED is reasserting its centrality to US defense planning. The prospect of new nuclear threats to those allied interests has generated calls – by allies – for the forward deployment by the US of its nonstrategic weapons.

The Obama administration has sought to strengthen extended deterrence to adapt to 21st century security concerns. Central to this response is the desire to avoid relying solely on nuclear

means to deter potential threats; in practical terms, this has meant the development of ballistic missile defense and prompt global strike capabilities. But, our US speaker emphasized, the US commitment to ED is defensive in character. Crucially, there is no intention to develop or rely on nuclear responses to gray zone challenges.

Over the decade that this dialogue has been held, Chinese views of extended deterrence have evolved. Ten years ago, our US speaker explained, there was ambivalence: Chinese were pleased that the US extended deterrent had kept US allies from proliferating (acquiring their own nuclear arsenals), but they were troubled by the prospect of new nuclear weapons in the region. Last year, Chinese participants claimed that ED "molested" their national interests, a level of hostility to ED that we had not heard before. That position was based on the assertion that the US, because of its ED commitments, was introducing a nuclear dimension to a conventional conflict. Americans parried that charge, arguing that nuclear weapons had always been in the background of the US defense posture and the sharpening of regional threats – in particular that posed by North Korea's nuclear and missile programs – had brought them to the fore. The US has not redeployed tactical nuclear weapons to the Korean Peninsula and has forcefully rejected calls for them; nor does it talk about a nuclear role in a Taiwan Strait contingency. The third offset strategy, our speaker insisted, aims to forge a credible security posture that does not rely on nuclear weapons.

The US is aware of concerns that its extended deterrent risks emboldening its allies and that it could encourage them to challenge China. It has had "frank discussions" with allies on those topics, but our speaker, along with all US participants, rejected the claim that problems along China's littoral are caused by the US extended deterrent. US participants also dismissed the Chinese claim that ED commitments were merely an excuse to upgrade alliances and contain and encircle China. While thinking about how the US and its allies should respond to China is not uniform, alliance modernization efforts that are underway are driven by the need to ensure that US commitments to defend allies can be honored.

Our Chinese speaker validated the US understanding of Chinese thinking. While conceding that alliances play a role in defusing regional disputes, that they limit the security choices of some allies (i.e., they defuse the temptation to proliferate), and that they have been modernized to tackle nontraditional security functions, he still complained that they are "a Cold War legacy," and their modernization has not undercut the most important – and to Chinese, disturbing – features: their exclusiveness, the identification of or search for adversaries, and their reliance on military measures. As a result, our speaker continued, China's attitude toward alliances is a function of the US attitude toward China.

Chinese see the US resort to extended deterrence and its reliance on nuclear weapons as giving North Korea an excuse to develop and maintain its own nuclear program. But our Chinese speaker espied a light at the end of this tunnel: the prospect of a nuclear exchange on China's periphery, which could escalate to an exchange between Washington and Beijing, gives those two countries a reason to sign a mutual no first use agreement to defuse that risk. At the same time, however, our speaker noted the great concern in China about nonnuclear attempts, in particular the development of missile defense, to assure allies.

Our speaker called on the US to adapt to the changing international environment by transforming its alliances and making them inclusive security arrangements that no longer focus on "assumed enemies." A security dialogue between the alliances and China could increase trust and help manage crises. Similarly, if allies want to play a positive role, then he recommended that they address nontraditional security challenges, not act as the handmaidens of US geostrategic interests. As always, he embraced a NFU declaration and urged the US to fully consider the risks and costs of using conventional weapons to secure the extended deterrent.

China remains worried about extended deterrence – the concept and its implementation. All the complaints that our US speaker outlined in his presentation were repeated by Chinese participants during the discussion. Their chief concern is simple, however: US alliances either target China or are designed to minimize China's ability to influence or threaten those allies' interests. The first charge is incorrect; the latter is right on. By definition, then, the alliances are anti-Chinese. Allies are increasingly worried about new Chinese capabilities and have signaled the US in a variety of ways for reassurance. The Obama administration's rebalance to Asia is an effort to respond to this demand signal, but the Chinese complaint that US policy is emboldening those allies confuses cause and effect. US allies, Japan in particular, worry that China is becoming emboldened by its new military capabilities, will engage in more risk taking, and will use its conventional forces in ways that harm Japanese national interests, and the US will not be able to defend them. In short, allies fear decoupling.

That opened the door to a discussion of US nuclear tactics, with Chinese participants probing to uncover the circumstances in which the US would use its nuclear assets in a conflict in Asia. Would the US use them in a gray zone challenge? Where is the nuclear threshold? They noted that the US had withdrawn tactical nuclear weapons from the theater but insisted that they could be reintroduced in a crisis. At the same time, Chinese speakers insisted that they would never threaten to use their nuclear weapons – after all, they have a NFU policy – and charged that any analogy to Europe, where the Soviet Union enjoyed conventional superiority, was unsupportable: the Soviets were hostile to their neighbors, while China has no such hostility to Asian countries. There are disputes, Chinese conceded, but they can be resolved through negotiation.

US participants rejected the Chinese objections. First, some speakers noted that extended deterrence is not relevant to all conflicts: the primary purpose of nuclear weapons is deterring a nuclear attack on the US or its allies, and their use is threatened only when the vital interests of the US or its allies are at stake. They are not, then, intended for use in gray zone challenges. They could be used to deter conventional attacks, but only if they threaten vital interests. Second, some speakers asserted that there is a difference between China and North Korea in US nuclear strategy, arguing that the US emphasizes strategic stability and not deterrence in the US-PRC relationship, whereas it emphasizes deterrence and not strategic stability in the US-DPRK relationship (largely because potential pathways to conflict with the DPRK are much more visible). Third, they insisted that the US no longer has tactical nuclear weapons in Asia at the end of the Cold War. The United States retains the ability to forward deploy nuclear bombs on bombers and maintains a limited force of forward deployed dual capable aircraft in Europe which are not counted in strategic arms control agreements. Finally, as in previous meetings —

and just as fruitlessly – US participants argued that the reluctance to embrace a "no first use" policy does not mean that the US has a "first use" policy.

Missile defense again raised concerns among Chinese, with interlocutors asking if the US would deploy strategic interceptors in Japan. Americans replied that there are no such plans nor any sense of a need to deploy such systems, but China appears concerned that the SM3IIA interceptor, currently under development by the US and Japan for use as a theater system, could be used as a strategic interceptor. While this question suggested the real Chinese concern about missile defense is the prospect of deeper integration of defense systems, and by extension, a tighter coupling of the US and its Asian allies, it also suggested a potential confidence building measure (CBM): a unilateral (US) or joint effort to differentiate between missile defense systems. Americans replied (as was noted in session 1) that if CBMs are the answer, then the US has offered China numerous briefings on its missile defense; all have been rejected. Plainly, the problem is not a lack of information.

Chinese speakers attempted to finesse the alliance issue. The most benign suggestion was that discussion of missile defense not be framed as a US-China issue but as one between China and the US and its allies. That is an accurate characterization, and one that might be worth pursuing as it could provide insight into ways the US and its allies negotiate their alliance. On the other hand, it could provide Beijing a wedge to drive between Washington and its partners. (It would be nice to think that the alliance could absorb such scrutiny and that the US and its allies would relish the chance to engage China directly in such a format.)

A more pointed suggestion was that the US embrace a "universal cooperative security" policy rather than the "exclusive" mentality embodied in the alliance framework. As one Chinese participant explained, "the US should show no less importance to cooperation with other major powers in the region that it does to its allies." Another Chinese participant put it more crudely: "the US needs to decide how important is relations with China are. Which is the US priority, extended deterrence or China?"

Strategic stability and strategic reassurance

While there has been measured progress, there remains a troubling lack of precision and certainty at the heart of the US-China strategic relationship. Bilateral relations remain a mix of cooperation and competition, and each country sees more to gain from the former than the latter. Neither country considers the other its main adversary and economic interdependence continues to bind the two countries together. There is stability to the relationship because China has accepted a fundamental asymmetry in power that nevertheless safeguards Beijing's core interests. Yet our speaker, along with many other Chinese, worries that competition is increasingly dominant within the relationship. He (and they) pointed to disputes over the South China Sea and Secretary of Defense Ashton Carter's May 2016 commencement speech to Annapolis naval graduates as signs of growing belligerence in US policy. These problems, he argued, stemmed from structural differences in the two countries and demand active efforts to manage the rising competition. To that end, he urged a focus on areas of agreement and more work to build trust.

US speakers agreed with much of that assessment: the two sides do have a complex relationship that is marked by many shared interests and some powerful divergences. And, despite all their shared concerns, competition is assuming an increasingly prominent role within the relationship. But, warned our US speaker, the prospect of a North Korean capability to strike the US homeland with a nuclear warhead would be a "strategic game changer" equivalent to the Sputnik launch with potentially far-reaching consequences for US relations with China (and Russia). The ultimate impact of that development depends on whether Washington and Beijing (and Moscow) engage in "mutual reassurance to manage and minimize the spillbacks of protective responses." There are a whole range of things the US could do to protect itself against the North Korean threat, and many of those responses could undermine and degrade China's deterrent. A likely reaction from China would follow and an action-reaction cycle would ensue. Thus, a failure to cooperate risks unilateral responses by each country that are "a clear pathway to expanded and unwanted China-US strategic competition."

Our speaker proposed a host of measures the two countries could explore together to manage and minimize that competition. They include: an official joint assessment of reassurance and predictability measures proposed in light of both countries' underlying concerns and of managing the spillbacks of DPRK nuclear missile shock. Emphasis would put on packages of measures that have asymmetry of application, are both formal and informal, and he called for pilot projects. To address Chinese strategic concern, he suggested the US and China explore joint DPRK threat response assessments; US reaffirmation of no new nuclear capabilities; annual data exchanges on specified US programs; CBMs for MD deployments; mutual no first attack pledges on strategic systems; and geographical limits on ASW-SOSUS deployments. To address US concerns, they could explore: official Chinese confirmation of "not seek parity" and "no build up" pledges; mutual no first attack pledges on strategic systems; exchanges on logic and process of Chinese nuclear posture deployment decisions; and annual data exchanges on specified Chinese programs.

A second US speaker followed with a positive appraisal of two bilateral mil-mil mechanisms, both of which were put forward by Xi Jinping at the Sunnylands summit and subsequently detailed in a Memorandum of Understanding in 2014. The first sets rules of behavior for safety in air and maritime encounters. The second involves advanced notification of major military activities. Both CBMs have been useful, the success of which is evident in its growth over time to include new annexes that address air to air encounters and crisis communications. Our speaker applauded the discussions of policy and posture that have followed and the improved understanding of intent. The Strategic & Economic Dialogue, which took place just before our meeting, specifically referred to those CBMs and both sides pledged to actively implement them. The statement also called for their expansion to incorporate exercises related to the Rules of Behavior for Safety of Air and Maritime Encounters in conjunction with agreed upon port visits discussions of additional annexes to the Notification of Major Military Activities MOU, including a mechanism for informing the other party of ballistic missile launches.

Strategic stability remains amorphous. Chinese interlocutors stressed that it can be interpreted two ways: broadly, to encompass the entire range of relations between the two countries, or narrowly, to just include its nuclear dimensions. Chinese colleagues stressed

repeatedly that tensions in the broader relationship (such as the South China Sea) could impact strategic stability, even though our nuclear relations currently remain stable, due to China's minimum deterrence policy.

Chinese interlocutors seem more comfortable using strategic stability as an organizing principle for the US-China strategic relationship. Central to this acceptance, however, is the notion of mutual vulnerability – an assured Chinese second strike capability. Several years ago, Chinese pressed their US counterparts hard for an official acknowledgement of the legitimacy of that capability; Americans declined, noting that such a statement was political impossible, while simultaneously urging Chinese to note that US capabilities indicated that this capability exists. The discussion of "asymmetric strategic stability" suggests that the Chinese have found a way to differentiate this term from its (problematic) Cold War origins, as well as offering some reassurance to the US that China does not seek parity.

After several years of relative quiet on the notion of mutual vulnerability, the topic again generated considerable comment in this year's meeting. This renewed attention could reflect concern about the survival of "strategic stability" as an organizing principle of the US-China relationship after Obama leaves office. Chinese participants asked about the policy review process that attends any new administration, the degree to which those reviews are separate or integrated, whether strategic stability will serve as the central theme, and, if not, what will replace it. US speakers said it is hard to discern the answers to those questions.

The final session was replete with concrete suggestions on ways the two countries could promote reassurance. Chinese suggested that the US:

- share radar data from the THAAD system deployed in South Korea;
- provide technical details of that system;
- declare that it has no intent to target China's sea-based systems;
- restrict the activities of maritime drones against China's sea-based systems;
- explicitly commit not to intervene in bilateral disputes in the South China Sea;
- conduct its South China Sea freedom of navigation operations in secret and not announce them (warning that if they were made public, China would be forced to protest); and
- declare that it will not launch conventional long-range strikes against China's nuclear facilities.

Americans called on their Chinese counterparts to:

- commit to the peaceful resolution of disputes, as well as freedom of navigation and reconnaissance;
- promise no more large-scale land reclamation projects in the South China Sea;
- pledge no further militarization in the South China Sea;
- provide data on China's MIRV capabilities;
- officially explain the logic of Chinese decisionmaking on deployments and capabilities; and
- declare that it will not launch a first attack on nuclear, space and cyber assets.

Together, the two countries could:

• conduct joint technical studies to distinguish tactical and strategic ASW systems;

- conduct joint assessments of what an action/reaction cycle in Northeast Asia would look like and how it might be averted;
- hold joint discussions of the implications of nuclear warheads on hypersonic glide vehicles (HGVs) or the impact of dual capable HGVs on crisis stability;
- commence minilateral dialogues that include the US and its allies and China, or the US and its security partners and China (one Chinese participant suggested a mini meeting that China would attend after the US completes its meeting with the ally or partner);
- add defense consultation annexes to the 2014 MOU; and
- share data on North Korean missile launches.

The tone of this year's meeting was more positive than anticipated. Despite repeated references to tensions in US-China relations and a defense of China's actions in the South China Sea (SCS), most Chinese participants sought areas of agreement, avoided pointed criticism of US behavior, and eschewed the usual talking points. There was almost no mention of Xi Jinping pronouncements, the "new type of major country relations," Japan militarism, or Taiwan. There was effort to put forward ideas and find solutions (albeit mostly aimed at reassuring China). The discussion on space and cyber focused on identifying areas of overlapping perspectives and opportunities to cooperate.

Unfortunately, progress remains elusive. Chinese did not appear reassured by US steps to address previous concerns, remained generally unreceptive to offers for track-one technical briefings, and offered few if any suggestions as to how China could and should reassure the US. Reassurance seems to only need to flow in one direction. Chinese counter that the core features of Chinese strategic policy remain constant. Beijing remains committed to a lean and efficient deterrent, that its NFU policy remains the bedrock of its thinking, and that foreign policy continues to be guided by the five principles of peaceful coexistence. US complaints that Chinese goals seem to grow with Chinese power, that core interests are expanding, and Chinese behavior is seen as destabilizing by many regional governments are ignored.

Still, we remain hopeful that we can use this track 1.5 process to help move the strategic relationship in the cooperative direction that both countries affirm is their goal. A working draft focused on nuclear, space, and cyber capabilities, their interactions, and implications for strategic stability was circulated at the end of the meeting as an initial effort to draft a joint statement on 'rules of the road' prior to our next meeting. (It is attached as Appendix C.) An informal working group is also being created focused on Korean Peninsula crisis management, to identify common objectives and a possible shared vision. The Chinese side seemed slightly more optimistic regarding eventual track-one dialogue and continues to see this dialogue as fueling that process. The next meeting is tentatively planned for early 2017, with a focus on recommendations for the incoming US administration.

By then, the next US president will have been elected and the world will have some insight into the parameters and preferences of that administration. While it usually takes six months to a year for the new team to find its feet and chart its own course, especially on foreign policy, the next US administration may not have the luxury of time. The tensions in the US-China relationship are growing, and the uncertainties that surround every transition could well

magnify them. The US-China Strategic Dialogue can help anticipate and expose some of the wrinkles, and even offer some constructive suggestions on how to address them.

APPENDIX A

The Tenth China-US Dialogue on Strategic Nuclear Dynamics A CFISS-Pacific Forum CSIS Workshop June 13-14, 2016, Beijing, China

CONFERENCE AGENDA

June 13, 2016

09:00-09:10 **Opening Remarks**

Chinese side: Qian Lihua US side: Dennis Blair

09:10-10:45 Session 1: Military Developments in the Asia-Pacific Region and Their Implications for US-China Bilateral Strategic Stability

What are the recent steps taken by the United States and China toward their military strategies and postures and modernization programs in the Asia-Pacific region? What, in particular, are the implications of Chinese military reform? What are the most important factors that shape these developments? What are their implications for strategic stability? How do the United States and China view each other's military developments and modernization programs? What developments or programs are of primary concern to each? How would the deployment of the US THAAD system to the ROK affect strategic stability?

Chinese moderator: Qian Lihua

US presenters: Roy Kamphausen, Michael Elleman

Chinese presenter: Yao Yunzhu

10:45-11:00 Coffee Break

11:00-12:30 Session 2: Nuclear Weapons and Cyber and Space Capabilities

What are the differences, similarities, and interactions between space, cyber, and nuclear capabilities? Have the United States, China, and others attempted to integrate nuclear, space, and cyber capabilities into their deterrent strategy and posture? If so, how? Is strategic conflict limited only to nuclear conflict or can military applications of cyber and space have strategic impact on war? Do nuclear weapons have any role in deterring attacks in cyber and space? Do space and cyber systems have any role in deterring nuclear attacks? Does the US characterization of the "congested, contested, and competitive" character of cyber and space increase the risks of unwanted escalation in conflict? If so, is it necessary and/or possible to work together to reduce them? How? Can we apply nuclear arms control experiences to cross-domain issues? What type of confidence-building measures can address these challenges?

US moderator: Ralph Cossa Chinese presenter: Li Bin US presenter: William Carter

12:30-14:00 Lunch

14:00-15:30 Session 3: US-Russia Relations, China-Russia Relations, and their Implications for Proliferation, Nonproliferation, and Disarmament

How do current US-Russia relations affect expectations about future strategic reductions, the implementation of existing nuclear arms control treaties (New START and INF), and US-Russia bilateral cooperation on nuclear nonproliferation and nuclear security? What is the impact of Moscow's concept of "escalating-to-de-escalate" on strategic stability? What are the implications for Asia of the INF Treaty compliance dispute and an associated weapons build-up by Russia? What is the status and nature of the separate bilateral China-Russia and US-Russia dialogues on these topics?

Chinese moderator: Yao Yunzhu

US presenter: Brad Roberts (on behalf of Linton Brooks)

Chinese presenter: Sun Xiangli

15:30-15:45 Coffee Break

15:45-17:15 Session 4A (Breakout Session): Initiatives of Solving North Korea Nuclear Issue (simultaneous interpretation provided)

What should be the focus of our efforts on the North Korea nuclear issue: preparing ourselves to respond to a crisis, seeking solutions to solve the problem, or both? What has been the impact of the January 2016 nuclear/missile activity on US-DPRK and China-DPRK relations? To respond to a new crisis (such as another test or a militarized provocation under a nuclear shadow), what preparations should the United States and China make? What actions should our two countries take before a crisis occurs? How should we coordinate actions during a crisis? In seeking solutions to the North Korea problem, what approaches should the two countries consider?

Chinese moderator: Zhang Tuosheng

US presenter: Ralph Cossa Chinese presenter: Yang Xiyu

<u>Group members on Chinese side</u>: Qian Lihua, Hu Side, Cui Liru, Li Ning, Lu Dehong, Ouyang Wei, Sun Xiangli, Xiang Ganghua, Yao Yunzhu, Zhao Tong

<u>Group members on US side</u>: Lewis Dunn, Robert Gromoll, Roy Kamphausen, Vincent Manzo, Brad Roberts, Robert Swartz, Drew Thompson, Michael Urena, Brandon Babin, Brad Glosserman, William Hostyn, Corey Johnston, Grace Park

Young Leaders: Cheng Duowen and Fiona Cunningham

Session 4B (Breakout Session): Challenges and Responses in Implementing the Iran Nuclear Agreement

What are the difficulties and challenges associated with implementation of the Iran nuclear agreement? How should the United States and China cooperate to overcome them? What can the two countries do if the agreement collapses? How can the United States and China cooperate to enhance regional security and, in particular, prevent nuclear and WMD proliferation in the Middle East?

US moderator: Christopher Twomey

Chinese presenter: Teng Jianqun, Liu Qiang

US presenter: Philipp Bleek

<u>Group members on Chinese side</u>: Fan Jishe, Huang Weiguo, Li Bin, Liu Chong, Wu Jun, Wu Riqiang, Zhai Yucheng, Zhang Yu, Zhu Chenghu

<u>Group members on US side</u>: Dennis Blair, Linton Brooks, William Carter, Michael Elleman, Leo Florick, Ian Francis, Christopher Twomey, Jennifer Bradley, Daniel Chen, Oriana Skylar Mastro, Jason Portner, David Santoro, Patrick Thayer

Young Leaders: Timothy Stafford and Wu Manman

17:30 Dinner

June 14, 2016

09:00-10:30 Session 4C (Plenary Reports on Breakout Sessions)

US moderator: Christopher Twomey Chinese presenter: Yang Xiyu US presenter: Philipp Bleek

10:30-10:45 Coffee Break

10:45-12:30 Session 5: The Roles of Nuclear and Strategic Capabilities in Military Alliances

What is extended deterrence? What is its purpose? What are the roles of nuclear weapons in extended deterrence and assurance? Does extended deterrence demand that Washington maintains additional numbers of nuclear weapons and forward-deploys them? Does extended deterrence demand a different set/type of nuclear weapons? Does extended deterrence or the assurance of allies demand that Washington maintain a strategic nuclear deterrent that is "second to none"? What other strategic capabilities are involved? How much does the US alliance system in the Asia Pacific drive the US assessment of US-China strategic stability and its decision to conduct additional nuclear reductions? How does China view extended deterrence? How have these views evolved since the end of the Cold War? How do Chinese military actions and policies affect the US alliance system?

Chinese moderator: Zhu Chenghu

US presenter: Brad Roberts

Chinese presenter: Zhang Tuosheng

12:30-14:00 Lunch

14:00-15:30 Session 6: Strategic Reassurance and Strategic Stability: How to Build and Sustain it?

What are the current trends in US-China security relations? How can we sustain bilateral strategic stability? How can we enhance strategic reassurance between the United States and China? What steps, including transparency measures, can each side take to provide reassurance to the other and our neighbors? What steps should each side refrain from taking? What could derail the relationship? What cooperative measures should China and the US take to improve the global nuclear environment? How can we work together in responding to nuclear terrorism? How can we cooperate beyond the 2016 Nuclear Security Summit? What's next for P5 cooperation on nuclear issues?

What signals do we want to send to the next US administration regarding avenues for China-US cooperation? How will a change in administration in Washington affect US-China strategic stability?

US moderator: Christopher Twomey

Chinese presenter: Cui Liru

US presenter: Lewis Dunn, Drew Thompson

15:30-15:45 Coffee Break

15:45-16:45 Session 6 Continues

16:45-17:00 Closing Remarks

US side: Dennis Blair Chinese side: Qian Lihua

17:30 Dinner

APPENDIX B

The Tenth China-US Dialogue on Strategic Nuclear Dynamics A CFISS-Pacific Forum CSIS Workshop June 13-14, 2016, Beijing, China

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APPENDIX C

Rules of the Road in Nuclear, Space and Cyber Domains (Working Draft)

The following draft "Rules of the Road" were developed in the course of discussions at the 10th China-US Dialogue on Strategic Nuclear Dynamics in Beijing on June 13-14, 2016. They are designed and intended to prevent misunderstanding during crisis or early stages of conflict or to avoid "war by accident" and conflict escalation. They will not, of course, prevent "war by intention." Our intention here is to develop a unofficial joint China-US track-two document for future consideration by our respective governments.

RULES OF THE ROAD

- Avoid any actions that would threaten the other country's secure nuclear second strike, for example:
 - -- Physical, space or cyber attacks or attack preparation against nuclear sensors and communications systems;
 - -- Enhanced physical or cyber surveillance of SSBNs and their home bases and support facilities.
- Avoid any actions that would threaten the other country's critical civilian infrastructure, for example:
 - --Deployment of widespread malware in power grids, air traffic control systems, oil and gas pipelines, financial systems, etc.
- Avoid ambiguous cyber activities that can be interpreted as preparations for critical infrastructure attack:
 - -- There will be many third party cyber activities that could be mistakenly attributed to China and the US, potentially causing dangerous reactions.
- -Confine anti-space activities to non-strategic military space systems and avoid attack on dual use (civilian-military) systems.
- Confine electronic warfare doctrines in both the US DoD and the PLA to attack against pure military systems.
- Take no procurement, doctrinal or operational actions that are inconsistent with these rules of the road, for example:
 - -- No cyber weapons for critical infrastructure attacks as part of the US "Third Offset";
 - -- No widespread Chinese anti-space weapon deployment and tests.
- Ensure that cyber, space and nuclear actions are consistent with official public declarations, for example:
 - --Do not deny cyber intelligence activities if they are taking place;
 - -- Do not deny space attack preparations if they are taking place.
- -Ensure that nuclear, cyber and space activities are controlled at a high government level during crisis:
 - --Do not delegate authority to lower levels;
 - --Quickly stop and acknowledge unauthorized activities at lower level.