US-China Nuclear Relations: The Impact of Strategic Triangles

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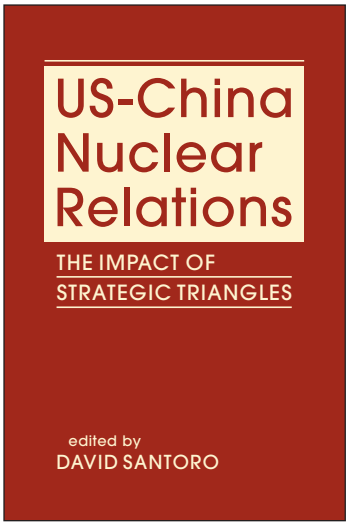

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The Importance of Strategic Triangles

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THE UNITED STATES IS IN THE MIDST OF REASSESSING ITS POLICY toward China. That reassessment is comprehensive in scope and, therefore, includes nuclear policy. At root, it involves addressing the following question: How should the United States adapt to compete most effectively against an increasingly powerful and combative China?

Until recently, and since the early 1970s, the United States was disinterested in making "strategic competition" the organizing principle of its relationship with China. Rather, the US goal was to engage China; integrate it into the international system; and "wait" until it changed economically, politically, and geopolitically. The goal, plainly, was to encourage China to endorse market forces, implement democratic reforms, and accept the existing Asian and international orders. That approach was best encapsulated in a 2005 speech by then US deputy secretary of state Robert Zoellick, who said that the United States wanted China to become a "responsible stakeholder" in the world.[1]

Not surprisingly, during that time, the United States paid little attention to the nuclear dimension of its relationship with China because, quite simply, that dimension was expected to evolve in a positive direction as Beijing transformed. Another reason was that China had developed only a small nuclear arsenal, which for a long time it chose to expand and perfect very slowly; US officials, therefore, thought that they could safely ignore it.

From the mid to late 2000s, however, despite promising signs in some areas, doubts began to grow in the US national security community that China would ever make the expected transition. One major red flag was Beijing's military modernization efforts, which became more sustained and even accelerated with the spectacular growth of the Chinese economy. Concerns increased further after the Great Recession of 2007–2009, which had disastrous effects for most countries but left China unscathed, and seemingly convinced Beijing that its authoritarian model of governance was superior to all the others, notably to the Western liberal democratic model. Beijing became much more assertive to advance its interests in Asia and beyond, especially, though not exclusively, in the South China Sea.

Although it was not immediately obvious, Xi Jinping's accession to the top of the Chinese Communist Party in 2012 was the final nail in the coffin, closing off any remaining hope that China would change to the United States' liking. Quickly, it became clear that Xi would rule China with an iron fist and that, under his leadership, Beijing would stop, and even backtrack on, economic reforms as well as more actively contest, rather than accept, the existing Asian and international orders and propose alternative institutions such as the Asian Infrastructure Investment Bank, a potential rival to the World Bank and International Monetary Fund, and the Belt and Road Initiative.

Despite these developments, until recently the United States had made only minor adjustments to its policy toward China. To be sure, Washington had increasingly hedged against Beijing's new assertiveness, notably by strengthening its alliances and developing new partnerships in Asia. Engagement, however, remained the order of the day. From a US perspective, while China had clearly not turned into a strategic partner, it had not become a strategic competitor either. Little, in these circumstances, was done to adjust US nuclear policy, strategy, and posture vis-à-vis Beijing.

The 2016 US presidential election provided an opportunity (and a platform) to debate US policy toward China and, with the arrival of Donald Trump in the White House in 2017, that policy began to change. It was first reflected in the administration's key strategy documents. For the first time, the 2017 *National Security Strategy* labels China (and Russia) a "revisionist power" and explains that the long-standing US policy of engaging rival states and including them in international institutions and global commerce to transform them into benign actors had failed.[2] The document goes on to stress that Washington will now change course and focus on competing against these states. Other documents, notably the 2018 *National Defense Strategy*,

echo this line of thinking, suggesting that China is by far the United States' primary strategic competitor and calling for a "seamless integration of multiple elements of national power" to push back against Beijing.[3] These themes also appear in the 2018 *Nuclear Posture Review*, which indicates that "while the United States has continued to reduce the number and salience of nuclear weapons, others, including Russia and China, have moved in the opposite direction."[4] Here, too, the message is clear: Washington will adapt its approach.

Though initially tentative and not implemented in a consistent manner, by and large the Trump administration has since moved to intensify competition against China in virtually all dimensions of the bilateral relationship and, as the following chapter will detail, there are already signs that this competition is extending into the nuclear domain. Significantly, while there are deep disagreements about strategy, the shift toward a more competitive stance toward China is one of the few policy areas that currently enjoys broad bipartisan support in the United States. Republicans and Democrats agree that the United States should adopt a new, comprehensive China policy, one that seeks to firmly balance, if not outrightly counter, Beijing's actions. This is a sentiment also increasingly shared by the US public.

The Covid-19 pandemic, which is ongoing at the time of this writing, will likely strengthen this sentiment among both US officials and the US public, and drive Washington to push back even harder against China. This is not because there is evidence that the Chinese government responded late to the virus after it first emerged in Wuhan. It is not even because Chinese officials silenced whistleblowers and covered up critical information about the virus' spread and severity, which is now having devastating health and economic consequences throughout the world, including in the United States. But it is because Beijing has been actively trying to reshape the narrative in its favor and use the pandemic for geopolitical gains, and in particular at Washington's expense. Beijing, for instance, has launched a global disinformation campaign to deflect blame for the virus on others (notably, the United States) and there are indications that it might seek to capitalize on the world's distraction to pursue its foreign policy goals more aggressively, be it in the South China Sea, vis-à-vis Taiwan, or elsewhere.

This overview makes one thing clear: the US-China rivalry that has emerged in recent years is here to stay, and it is likely to continue to intensify in the foreseeable future. What is more, that rivalry has not insulated any dimension of the bilateral relationship, not even the nuclear dimension, which until then had remained largely muted.

This book, as the following pages will explain in greater detail, reflects on the impact that this growing US-China *nuclear* rivalry will have on the Asian and international security orders. It focuses on the interplay between the US-China bilateral nuclear relationship and other key states. The book does so by following a triangular approach: it examines, in turn, the nuclear relationships between the United States, China, and a third state (or a set of third states) with an eye to improving understanding of the current and looming "nuclear geometry" in Asia and beyond, and to drawing implications for US policy.

Ripe for Rivalry 2.0

Some scholars had long anticipated that there would be trouble in Asia, and with China in particular. In the early 1990s, as Francis Fukuyama posited his influential thesis that humanity had reached the "end of history" with the end of the Cold War and the "universalization of Western liberal democracy as the final form of human government" (a thesis quickly countered by Samuel Huntington, his mentor), Aaron Friedberg explained that this optimistic outlook would not apply to Asia.[5] In a landmark *International Security* article published in the winter of 1993–1994, Friedberg argued that bipolarity had given way neither to unipolarity nor to multipolarity, but to a set of regional subsystems in which clusters of contiguous states with different force levels interact mainly with one another, a feature he labeled "multi-multipolarity" or "regional multipolarity."[6] He went on to explain that Asia, unlike Europe, was not heading toward more peaceful and prosperous times but, on the contrary, that for a myriad of economic, social, political, and geopolitical reasons the region was "ripe for rivalry" and even likely to become "the cockpit of great power conflict."[7] Friedberg predicted that Asian countries would engage in intense arms races and that smaller states would choose sides among the regional and major powers, allying with some to balance others. Later, in his book *A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia* (2011), Friedberg would contend that China's goal is to "win without fighting" and displace the United States as the leading power in Asia.[8]

A few scholars shared Friedberg's pessimism at the time.[9] Many others, however, disagreed with the fundamentals of his thesis, explaining that Asia was fast developing security cooperation and economic interdependence, a dynamic that had begun in the late 1970s and, they argued, would extend far into the future. For instance, Robert Scalapino contended in a 1991 *Foreign Affairs* article that:

> The future of Asia and of American relations with Asia are promising. The risks of a major power conflict are small. Most subregional tensions have eased and, with very few exceptions, the costs of armed struggle, even between smaller states, are such as to make that option highly undesirable to the leaders concerned. Meanwhile the new priorities are on economic development. Hence pragmatism is ascendant, ideology at a lower premium.[10]

At the turn of the century, these scholars pointed to evidence suggesting they had been right, as China was seemingly developing into, and increasingly being viewed as a benign status quo power, with smaller Asian countries refraining from forming a coalition to contain it.[11] These scholars also stressed that China's "New Diplomacy" of engaging regional institutions and its neighboring countries, including some former enemies such as South Korea, Vietnam, and India, had a soothing effect on the region's quiet concerns about Beijing's increasing power.[12] It appeared that Asia might not be, or ever would be, "ripe for rivalry" as Friedberg had assessed but, despite a few important hotspots and the possibility of flash points, that the region might instead be in for a long peace or, as Thomas Berger put it in a 2000 article in *Review of International Studies*, "set for stability."[13]

Yet as the 2000s progressed, several scholars began to acknowledge that there were many looming questions about the future of Asian security and stability in light of the systemic change in the power balance anticipated from the rise of China and other regional states. Still, these scholars remained cautiously optimistic because, they calculated, change in Asia would probably be incremental, evolutionary, and relatively peaceful; there would not be revolutionary change through hegemonic war.

To support their argument, these scholars advanced various reasons. One was that power increases, for China and others, would be gradual, could suffer reversals, and that in any event Chinese power would not come close to matching US power in the foreseeable future.[14] Another reason was that a rising China might seek to alter the status quo to serve its interests and enhance its influence, but would also feel constrained by US power as well as reluctant to press too hard because it would want to be seen as a positive force in Asia and the world, not as a revisionist power.[15] A third reason was that except for the Taiwan situation, there was no issue that could lead to war between the United States and China. A final reason was that Beijing had not begun to articulate an alternative approach to regional governance and that, despite success in its policy

of good neighborliness, it still had a long way to go to develop trusting relationships with regional states. Accordingly, the argument went, change in Asia would not be tension free, but it would likely take place peacefully.

Fast-forward to the early 2020s and, as discussed earlier, the landscape looks considerably different. To be sure, China is still much weaker than the United States, Beijing does feel constrained by US power, and there has not been revolutionary change through hegemonic war. But over the past decade Beijing has worked hard to change the regional status quo much more aggressively than anticipated, seemingly without regard for the reputation costs. Moreover, while the Taiwan situation remains the most volatile, there are now other areas where confrontation could begin, notably in the South China Sea, but also in other domains such as in cyberspace. Finally, while they have been received with mixed feelings by regional states and others, Beijing has made impressive progress in setting up alternative regional and even global institutions of order that advance its interests.

In short, the nature and pace of change in Chinese behavior and actions, not to mention developments *in* China, have been generally negative and have surprised many over the past few years. That is why Friedberg's "ripe-for-rivalry" thesis has come back in fashion with a vengeance. As Friedberg himself put it in a 2018 *Survival* article, "There appears to be a growing consensus in Washington, and in the capitals of many other advanced industrial democracies, that prevailing [engagement] policies towards China have failed and that an alternative approach is now urgently required."[16]

Not surprisingly, then, important scholarly work on the current and looming challenges posed by China (and how the United States should respond) began to surface in the 2010s. Michael Pillsbury's *The Hundred-Year Marathon* (2015), which describes China's strategy to replace the United States as the global superpower, is a case in point.[17] Also significant are Henry Kissinger's *On China* (2011), a comprehensive study on Chinese diplomacy and US-China relations that recommends the creation of a Pacific Community along the lines of the Atlantic Community to promote security through inclusivity and mutual respect; Hugh White's *The China Choice* (2013), which explains that the United States must accept China as an equal partner and share power; and Graham Allison's *Destined for War* (2017), which argues that, while it is not inevitable, war between the United States and China is nevertheless a real possibility.[18]

The Nuclear Dimension

These developments are echoed in the history of nuclear weapons over the past thirty years, as well as in its analytical literature. After the Cold War, many in the United States and the West thought that, with the collapse of the Soviet Union and hopes for the "end of history," the end of nuclear weapons was near or, at least, within reach—for good reasons. It suddenly became possible for the United States and Russia to conduct deep cuts on their arsenals, allowing the United Kingdom and France to do the same. Washington, London, Paris, and at first even Moscow also proceeded to push their remaining nuclear weapons into the background of their defense policies, farther than at any point since the dawn of the nuclear age. Well into the 1990s, the pursuit of disarmament (and nonproliferation) replaced the pursuit of deterrence capabilities as the new priority in nuclear affairs. As Richard Paulsen put it in his book, *The Role of US Nuclear Weapons in the Post–Cold War Era* (1994), "The nuclear arms race did an about-face in 1991 and became a disarmament race."[19]

From the mid- to late 1990s, however, several scholars began to ring the alarm bells, explaining that a "second nuclear age" was emerging.[20] That term had several meanings and interpretations but, at its most basic, it sought to convey the idea that the end of the Cold War did not mean the end of nuclear weapons for one simple reason: more countries were taking an interest in acquiring these weapons. The term *second nuclear age* also suggested that the emerging nuclear landscape would be different from the first. Two aspects stood out in particular. One was the relationship between nuclear and conventional weapons, which was beginning to evolve rapidly, leading to new, complex forms of deterrence, including those involving the offense-defense balance. Another aspect was a fast-changing Asia with the advent of new nuclear-armed states mostly in that region (with India, Pakistan, and then North Korea crossing the nuclear threshold), several states with latent nuclear capabilities (notably Japan), and an increasingly powerful nuclear-armed China.

In this emerging multitechnology and multiplayer geometry, many wondered if deterrence would hold as well as it did in an environment dominated by only two states, as was the case during the Cold War.[21] Concerns were especially high given the great asymmetry of forces between the new nuclear-armed states, their close proximity to one another, their tight strategic interconnectedness, and the broader instabilities inherent to Asia that Friedberg had described a few years earlier.[22] Some scholars were deeply pessimistic, arguing

that intense arms racing was likely and the risks of nuclear use were high, much higher than even during the Cold War, because many of the new nuclear-armed states were led by authoritarian leaders dissatisfied with their regional security orders. Richard Betts opined in a 1998 *Foreign Affairs* article that, in the post–Cold War world, "there is less danger of complete annihilation, but more danger of mass destruction."[23] Thérèse Delpech concurred, writing in *Survival* later that same year that "the risk of nuclear use may be higher in *regions* where non-status-quo power with authoritarian regimes prevail."[24] These scholars, plainly, argued that all the ingredients for nuclear instability were present.

Other scholars pushed back, stressing a decade later that these dire predictions had not materialized. On the contrary, nuclear weapons, they said, had largely contributed to the security of states and reinforced stability in Asia. This is the chief conclusion of Muthiah Alagappa's comprehensive study *The Long Shadow: Nuclear Weapons and Security in 21st Century Asia* (2008), which built on Kenneth Waltz's thesis that the spread of nuclear weapons may have some important stabilizing effects.[25] In that study, Alagappa explained that nuclear weapons in Asia remained mostly in the background, but nevertheless had a powerful influence because of the "long shadow" that they cast, informing in fundamental ways the strategic policies of the major powers and their allies with far-reaching—positive—consequences for regional security and stability. He further contended that deterrence in a condition of asymmetric power relationships was, and would remain for the foreseeable future, the primary role of nuclear weapons in Asia, adding that more offensive (compellence, coercive diplomacy, war fighting) and defensive (counterforce damage limitation) roles of such weapons as well as strategic defense against them would be of marginal utility. In short, Alagappa argued that deterrence had been, and would continue to be, the dominant strategy for the employment of nuclear weapons in Asia.

Many questioned that optimism, arguing a few years later that the outlook for Asia's nuclear future was negative, for three reasons. First was because evidence emerged that Asian states, and regional powers generally, held fundamentally different views about the role and utility of nuclear weapons and, as a result, that deterrence might not remain the dominant strategy. In a 2010 *International Security* article, Vipin Narang identified "three distinct types of regional power nuclear postures: a catalytic posture, an assured retaliation posture, and an asymmetric escalation posture."[26] He argued that with a catalytic posture, regional powers seek to entice a superpower—typically

the United States—to intervene on their behalf and smooth over regional conflicts, as was the case of Israel in the 1970s and Pakistan in the 1980s. Narang then explained that, with an assured retaliation posture, regional powers intend to retaliate if they are the victim of a nuclear attack, as is the case of China and India today, and, with an asymmetric escalation posture, that their goal is to present a credible threat of a first nuclear strike in response to a conventional attack, as was the case of France during the Cold War, and is the case of Pakistan today. Other scholars stressed that regional powers gave additional roles to nuclear weapons. For instance, in a limited war context, some might consider nuclear use to force adversaries to back down; this is the "escalate-to-de-escalate" logic often attributed to Russia.[27] Meanwhile, others might "use" nuclear weapons for bargaining or coercive purposes, as in the case of North Korea.

Second, scholars explained that strategic interactions in Asia and elsewhere now involved more than just nuclear weapons, a problem which, as mentioned earlier, emerged in the late 1990s but became much more prevalent from the late 2000s. Scholars stressed that the development and deployment of increasingly sophisticated strategic defenses, which for now remained limited in scope, could soon fundamentally alter the balance between deterrence and offense, especially in Asia where states had only small nuclear forces. States with effective ballistic missile defenses, plainly, might soon have the option to reduce significantly, if not eliminate completely, their vulnerability to nuclear weapons, de facto rendering deterrence ineffective and leading to new potentially less stable strategic situations. Scholars also highlighted that the development and deployment of long-range, highly lethal conventional weapons were rapidly obscuring the nuclear-conventional distinction, with profound implications for the integrity of the nuclear threshold and for stability. An additional problem was the rise in prominence of the role of space and cyber in strategic conflict, which could pose similar stability issues because of imprecise rules of engagement in these domains and the possibility of spillover effects into both the conventional and nuclear domains. These scholars, in sum, argued that while there never was a distinct redline of escalation into the strategic realm, that line was now becoming increasingly blurry, foreshadowing increasingly dangerous times.

Third, several scholars pointed out that another problem was that Asian states increasingly interacted in complex, polygonal relationships rather than dyadic ones. In a 2011 *Asia Policy* article, Christopher Twomey explained that China, India, Japan, North Korea, Pakistan, Russia, South Korea, and the United States now all looked at

more than one regional player as they framed their security policies, and he showed that several key triangular relationships were emerging such as between the United States, China, and Russia, or between the United States, North Korea, and China, among others.[28] These are developments that a few scholars had anticipated a few years earlier: Brad Roberts, for instance, described many of these emerging patterns of complex strategic interactions in a 2000 monograph, *Nuclear Multipolarity and Stability*.[29] Twomey, like Roberts and a few others, argued that such polygons—triangles—of strategic interactions were deeply unstable and fertile for conflict, as exemplified in George Orwell's famous novel *Nineteen Eighty-Four* (1949), which describes a world divided into three superstates—Eastasia, Eurasia, and Oceania—in a state of perpetual war, with two superstates sometimes aligning against the third, and all three often switching alliances. These scholars also highlighted that the inherent instability of triangular relationships was backed up by international relations scholarship and game theory. In his foundational book *Systems of States* (1977), for instance, the late international relations professor Martin Wight concluded that "triangles tend to be mobile figures of shifting alliances and negotiations," adding that "triangles, like duels, are relationships of conflict, and are resolved by war."[30] Subsequent game theory work on "truels" (a three-party expansion of a duel) confirmed these findings, and more recent scholarship reached similar conclusions, pointing to the emergence of a growing number of "security trilemmas," notably in Asia—actions taken in one bilateral relationship that have cascading effects in another.[31]

While disagreeing about the new age's likely impact on security and stability, second nuclear age scholars nonetheless agreed about its fundamental features: that it was a multitechnology and multiplayer geometry with Asia as the epicenter. These scholars also all pointed out that these dynamics flew in the face of the "disarmament race" initiated by the United States, much of the West, and a few others in the early 1990s. As Brad Roberts explained in a 1998 monograph, *The Future of Nuclear Weapons in Asia*, "The nuclear future desired by many in the West (and elsewhere) of nuclear deemphasis and ultimate abolition is held hostage to developments in Asia. If the actions of governments are to have any hope of shaping events in ways conducive to our interests and aspirations, the analysis that informs them must begin to come to terms with the realities and perceptions that shape nuclear trends in Asia."[32]

When attempting to raise awareness in Washington and elsewhere about ongoing strategic dynamics in Asia, second nuclear age

scholars typically focused on India and Pakistan given their overt nuclearization in 1998, which set the subcontinent on a new path and raised numerous questions about its security and stability as well as the possibility of spillover effects into the broader region. North Korea, which began testing long-range missiles in the late 1990s and crossed the nuclear threshold in 2006, was also much in focus, especially given the implications for US regional allies, notably South Korea and Japan, as well as US deployed forces in the region.

A few scholars, however, were quick to stress that the focal point of interest—and the big question mark in the years ahead—was China because it was well on its way to becoming a global power, because there was considerable uncertainty about its nuclear future in the context of its rise, and, significantly, because it had unique strategic interconnections and interactions with both the established major nuclear powers and the rest of Asia. Roberts made that latter point clear in his 2000 monograph, highlighting that "China's nuclear identity is both global and Asian—its nuclear relations with the United States and Russia are dominant, but it is also keenly aware of its nuclear relations to the Asian subsystems."[33] Christopher Twomey concurred, stressing a few years later that China "sits at the fulcrum of several triangular security dilemmas in the strategic realm."[34]

As a result, scholarship on China's "nuclear profile" began to emerge, much of which built on the seminal works by Alice Langley Hsieh as well as John Wilson Lewis and Xue Litai on the origins of Beijing's decision to enter the nuclear club and the early evolution of the Chinese nuclear strategy and weapons program.[35] Examples include books such as Avery Goldstein's *Deterrence and Security in the 21st Century: China, Britain, France, and the Enduring Legacy of the Nuclear Revolution* (2000), Paul Bolt and Albert Willner's *China's Nuclear Future* (2005), and Jeffrey Lewis's *The Minimum Means of Reprisal: China's Search for Security in the Nuclear Age* (2007).[36] Much of that scholarly work sought to answer the question of whether China, which had "only" developed, and for a long time maintained, a small nuclear arsenal, would preserve a minimum deterrence posture or pursue more ambitious means to engage in limited deterrence in the context of its rise.[37] The results were almost unanimous: they showed that minimum deterrence continued to capture the essence of China's approach to nuclear weapons and that there was no indication that Beijing would change that approach in the foreseeable future, despite its military modernization program and the slow but steady growth of its nuclear arsenal.

Until recently, however, and despite actions by some politicians pushing Washington to reconsider its engagement with Beijing (by alleging, for instance, that China had conducted covert operations within the United States during the 1980s and 1990s that contributed to the enhancement of its nuclear-armed intercontinental ballistic missiles and the manufacture of weapons of mass destruction), work on the US-China bilateral nuclear *relationship* was extremely scarce, to the displeasure of several strategists.[38] At the turn of the century, for instance, Roberts lamented that the US national security community recalled China as "little more than a footnote in the history of the nuclear era"[39] and, a few years later, he argued that US officials were still (wrongly, in his view) treating Beijing as an "afterthought."[40] In the early 2000s, only a handful of analysts were pressing Washington to start thinking about the relationship it should seek to develop with this "forgotten nuclear power" because, they insisted, "over the next decade it will likely be China, not Russia or any rogue, whose nuclear weapons policy will concern America most."[41]

A few scholars had made similar complaints decades earlier. In 1981, for instance, Timothy Huntington argued that China's nuclear arsenal is "a facet of international power too often ignored."[42] Then, in 1989, Chong-Pin Lin insisted that there was "insufficient Western attention" devoted to that problem, warning that:

> An inward-looking, melancholy-faced, and slow-moving panda will not overnight become a howling and mauling grizzly. The panda, however, has the potential to gradually transform itself into an outward-looking, self-assured, and dynamic dragon. The nature of the dragon, belligerent as Saint George's assailant monster or benevolent as conceived in Oriental mythology, depends on the persuasion of the political rule in China. In either case, the days when China's nuclear weapons strategy could be taken lightly are now history.[43]

Behind the scenes, several Track 2 and Track 1.5 (i.e., unofficial) US-China nuclear-focused dialogues were launched from the mid-2000s. Involving a select group of US and Chinese government officials and subject matter experts, these processes not only sought to help Washington and Beijing better understand each other's views and perceptions about nuclear weapons, but also to contribute to developing what could become the contours of a stable and predictable bilateral nuclear relationship. A considerable amount of (good) work was done but, for many years, Washington did not treat

these processes as a first-order priority which, unsurprisingly, suited Beijing perfectly: by and large, Chinese participants even advocated against giving too much prominence to that relationship.[44]

The scarcity of work on, and the limited attention given to, the US-China bilateral nuclear relationship is not surprising. By and large, and for a long time, scholarship in the field has been focused on the US-Russia relationship (and on the US-Soviet relationship during the Cold War) because Russia has been, and remains, a nuclear peer competitor to the United States. Still today, for instance, Russia is the only country in the world deemed capable of completely destroying the United States. By contrast, China was never a nuclear peer and even now, the asymmetry between the two powers is vast: China is a much weaker nuclear power than the United States. What is more, and contrary to the beliefs held in the West immediately after the Cold War, the "Russia nuclear problem" has not faded away. Washington and Moscow failed to move nuclear weapons from the foreground into the background of their relationship, a failure that became obvious after Russia's annexation of Crimea in 2014, which led to the downward spiral of US-Russia relations, including in the nuclear domain, with far-reaching consequences for European security and stability. Incidentally, these developments have shown that the second nuclear age narrative has limits because, unlike what many had predicted, it is now clear that the nuclear future will not be written in Asia only: US-Russia nuclear relations and strategic dynamics in the Euro-Atlantic area will continue to play an important role in shaping that future.

In addition to Russia, the United States has had other priorities that have overshadowed China, and these priorities have filled much of the nuclear scholarship space. Moreover, and as the next chapter will explain in more depth, the United States assumed for a long time that China was part of the solution to address these priorities. One such priority has been the so-called pariah states with nuclear weapon ambitions, notably North Korea, which have forced the United States to devote a considerable amount of time and energy to work with regional allies, notably South Korea and Japan, to adapt extended deterrence and assurance. Another priority has been strengthening the nonproliferation regime to make it more difficult for nuclear weapons aspirants (such as Iran) to reach their goal and, after the September 11 attacks against the United States and in the context of increased awareness about the potential risks of nuclear terrorism, strengthening the nuclear security regime. Finally, while they have never been considered a US priority given

the absence of direct implications for the United States or US allies, Washington has paid more attention to India and Pakistan than to China because of the rising possibility of nuclear use on the subcontinent, be it during the 1999 Kargil War or as a result of subsequent (and recurrent) skirmishes, incidents, or standoffs between the Indian and Pakistani militaries.

Yet with the US-China relationship becoming increasingly competitive and China featuring prominently in the 2018 US *Nuclear Posture Review*, where it is regarded as a significant "problem country," the tables have now turned. To the United States, China has become a nuclear priority of the first order and, as a result, new scholarship on China and nuclear weapons has begun to proliferate in recent years. This scholarship can be divided into two broad lines of work.

One line has focused on further exploring China's "nuclear profile," particularly in the context of its increasingly sustained military modernization efforts. Several foreign policy think tanks have produced important studies in this area. The RAND Corporation, for instance, has issued two major reports: *China's Evolving Nuclear Deterrent* (2017) and *China's Evolving Approach to "Integrated Strategic Deterrence"* (2016).[45] Independent scholars have produced cutting-edge work, too. This is the case of professors Fiona Cunningham and Taylor Fravel, who have published the articles "Assuring Assured Retaliation" (2015) and "Dangerous Confidence? Chinese Views on Nuclear Escalation" (2019) in *International Security*, and Tong Zhao from the Carnegie Endowment for International Peace, who has released *Tides of Change: China's Nuclear Ballistic Missile Submarines and Strategic Stability* (2018).[46] By and large, despite notable exceptions, this body of work has shown that China remains a much weaker nuclear power than the United States and that, for now, Beijing maintains its traditional minimum deterrence posture. At the same time, however, these studies explain that Beijing is gaining strength and developing an increasingly sophisticated arsenal.[47]

The other line of work has focused on unpacking the ins and outs of the long-neglected US-China bilateral nuclear relationship, with some studies emerging a little before the "formal" US shift to strategic competition, as the relationship was starting to ebb. Examples include Michael Wheeler's monograph *Nuclear Parity with China?* (2012); Brad Roberts's chapter "The Evolving Relationship with China" in his book *The Case for Nuclear Weapons in the 21st Century* (2016); Michael Nacht, Sarah Laderman, and Julie Beeston's

monograph *Strategic Competition in China-US Relations* (2018); and Caitlin Talmadge's paper "The US-China Nuclear Relationship: Why Competition Is Likely to Intensify" (2019).[48] Foreign policy think tanks have also produced some work in this area, including a report from the Center for Strategic and International Studies, *Nuclear Weapons and US-China Relations* (2013), and more recently an edited volume by the National Bureau of Asian Research, *US-China Relations in Strategic Domains* (2016).[49] On the whole, this body of work has shown that nuclear weapons, once in the background of the US-China relationship, are likely to move increasingly into the foreground, an indication that Washington and Beijing will soon be in much more dangerous (and uncharted) territory.

This recent scholarly work has done great service in that it has helped improve knowledge about China's general approach to nuclear weapons and the US-China bilateral nuclear relationship. So far, however, one critical dimension has been overlooked: the interplay between the US-China bilateral nuclear relationship and other states. Plainly, there has not been a thorough analysis of the role and influence that other states exert on that relationship, and how Washington and Beijing relate to such states, especially in the context of increasingly intense and competitive US-China strategic relations.

This is an important gap because the United States and China have, as mentioned earlier, deep interconnections and interactions with several other states, many of which are key players in the global and Asian nuclear orders. At the major power level, the United States and China have a special relationship with Russia. But both are also intertwined with multiple other systems and subsystems, in Asia and beyond. Each has an interest in, and is therefore connected to, developments with pariah states such as North Korea and Iran. Both US and Chinese strategic thinking and actions are driven by developments in US regional alliance relationships and partnerships. The United States and China, finally, are each connected, in their own unique ways, to strategic nuclear dynamics in South Asia.

There is another reason why examining the role and influence that several key states exert on the US-China bilateral nuclear relationship is worthy of special attention: that is the asymmetric nature of that relationship. Because the United States and China do not have a peer-to-peer relationship in the nuclear domain, other states have, at least in theory, a considerable opportunity to shape that relationship. This is especially true now given that many such states have become increasingly powerful and have developed, as a result, greater agency over the US-China bilateral nuclear relationship.

Accordingly, it is paramount to reflect on the impact that tighter US-China nuclear bipolarity will have on other states because this dynamic will, to a large extent, shape and even potentially reshape the future of the global and Asian strategic nuclear landscapes. This comes down to asking the following questions: What effects will tighter nuclear coupling between Washington and Beijing have on the regional and international security orders? Specifically, how will growing competition change Washington and Beijing's thinking and actions vis-à-vis other capitals? How will other states adapt in the face of such competition? Will there be any "triangulation" attempts, in that states will seek to exploit the emerging rivalry between the United States and China as a means to shape the balance of power to their advantage?[50] Will states instead bandwagon with one side over the other? Or will they hedge their bets as US-China strategic competition is unfolding? What are the consequences of such dynamics? Finally, from a US perspective, what are the implications, and what should Washington do to anticipate and shape these dynamics in its favor?

About the Book

This book analyzes the interplay between the US-China bilateral nuclear relationship and other key states by following a triangular approach. It examines, in turn, the strategic nuclear relationships between the United States, China, and a third actor (or a set of third actors), focusing particularly on developments that have taken place since US-China relations began to grow increasingly competitive. This analytical approach—"US-China-X"—will help assess change and continuity in each triangle, providing key insights into how the Asian and global nuclear orders could evolve in the foreseeable future. With that approach, the book is intended to be a contribution to a better understanding of the current and looming nuclear geometry in the emerging era of US-China strategic competition. It also aims to draw important implications for the United States and make recommendations for US policy.

In pursuit of these goals, this book proceeds as follows. It begins with a more complete examination of the US-China bilateral nuclear relationship. Conceived as a baseline for the book's analytical focus, and written by me, Chapter 2 reviews the evolution of the relationship from the time China jump-started its nuclear weapons program to today, highlighting elements of both change and continuity. It also examines relevant developments in the broader, non-nuclear relationship with an eye to explaining their influence on the policymak-

ing process and how US-China bipolarity has grown over time. In so doing, the chapter touches on the roles and influence that other states have had on the evolving US-China bilateral nuclear relationship.

The four subsequent chapters build on that analysis by zooming in on specific US-China "strategic nuclear triangles." Authored by John Warden, Chapter 3 examines the US-China-Russia triangle, arguably the most important because it comprises the world's three major nuclear-armed states. Historically, the United States and Russia have regarded China as a "lesser included case" because Beijing has had a much smaller nuclear arsenal; that is why, so far, only the United States and Russia have had an arms control relationship. Since the end of the Cold War, however, China has steadily expanded and perfected its nuclear arsenal, and it has also engaged in significant military developments in other areas. In recent years, the US emphasis on competition against authoritarian powers has pushed Russia and China close, including on nuclear issues. These dynamics have created concerns in Washington about the future direction of China's relationship. This chapter evaluates plausible futures for the US-Russia-China nuclear triangle and how it could affect the US-China relationship.

Chapter 4 then focuses on the triangular relationship between the United States, China, and the pariah states: North Korea and Iran. Written by Robert Einhorn, this chapter explains that the pariah states violate international laws and norms and that the United States and China, while in (very) general agreement about the diagnosis of these states' behavior and actions, do not typically see eye to eye about the ways and means they should employ to address these problems. As a general rule, for instance, while China favors a diplomatic approach, the United States is more inclined to resort to sanctions, and it does not rule out the use of force. How growing US-China nuclear bipolarity is likely to impact management of the "pariah state problem," and, specifically, how the pariah states will adapt to that new reality, is the focus of this chapter.

In Chapter 5, Brad Glosserman looks at the strategic nuclear triangle formed by the United States, China, and US allies in Asia as well as Taiwan. The logic of this triangle is simple. US regional allies and Taiwan each have a special relationship with the United States, one anchored, in varying degrees, in mutual defense commitments that include, at least for some, protection under the so-called US nuclear umbrella. Meanwhile, US allies and Taiwan all have a complicated—and generally distrustful—relationship with China, especially now that the regional balance of power is rapidly shifting

in Beijing's favor. This chapter examines how these dynamics are likely to evolve in the face of increased US-China nuclear coupling.

Penned by Toby Dalton, Chapter 6 explores another significant strategic nuclear triangle, the one between the United States, China, and South Asia; the subcontinent hosts two long-standing bitter enemies, which are also emerging as powerful nuclear-armed states: India and Pakistan. In this triangle, both the United States and China, in addition to envisioning a war with each other and, therefore, to having a relationship of mutual deterrence, have complicated relationships with the two South Asian nuclear powers. The United States is getting strategically closer to India by the day, and it engages, but generally has deep distrust for, Pakistan. China, for its part, is strategically close to Pakistan, but it strongly distrusts India; de facto, China also has an emerging deterrence relationship with India. This chapter examines the impact of growing US-China strategic competition on these dynamics.

The book's final chapter, written by me, sets out the conclusions from this work. It brings together all the chapters' findings and reflects on broader strategic considerations to draw lessons for the US-China bilateral nuclear relationship and, more generally, for the Asian and global nuclear orders. The chief argument is that there is now ripeness for general nuclear rivalry and, therefore, that the prospects for the future are not bright, even though opportunities to stabilize these orders still exist. Significantly, however, our analysis in this book reveals that the nuclear future will not be determined solely by the United States and China; other players will shape that future as well. This concluding chapter also considers the implications for the United States. It returns to the question posed at the beginning of this introductory chapter and asks, "What should the United States do?" in light of these conclusions and lessons, and it closes with several recommendations for US policy. The chapter stresses that today, more than ever, the United States should set clear priorities and goals and, to that end, that it should focus on the major power game and seek to stabilize its strategic interactions with China and Russia; address the pariah state problem by pursuing negotiating processes with North Korea and Iran; engage its regional allies and partners and opt for greater political and strategic integration with them; and limit nuclear dangers, wherever and whenever possible.

As a study of the interplay between the US-China bilateral nuclear relationship and other key states, this book is the product of my personal research on China, Asian strategic dynamics, and

nuclear policy writ large, and it also draws heavily on what I have learned in shaping and running various Track 1.5 and Track 2 strategic dialogues in Asia for over a decade. In this latter regard, particularly formative has been my first-hand involvement in the Track 1.5 China-US Strategic Nuclear Dynamics Dialogue, which my organization, the Pacific Forum, spearheaded in collaboration with the Beijing-based China Foundation for International Strategic Studies between the mid-2000s and the late 2010s (and with support from the US Defense Threat Reduction Agency). My participation in various other dialogue processes of a similar nature, including with Russia, North Korea, US allies in Asia and Europe, as well as several other key actors, has also deeply influenced my thinking and, therefore, this book's orientation, conceptual framework, and approach. Significantly, these experiences have taught me the value of engaging the best specialists to investigate either specific issue areas or to provide thorough country expertise, an approach reflected in this book, as it is multiauthored and relies on established scholars in the field for the four US-China strategic nuclear triangles in focus.

Notes

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7. Ibid., 7.

8. Aaron L. Friedberg, *A Contest for Supremacy: China, America, and the Struggle for Mastery in Asia* (New York: Norton, 2011), 156.

9. See Richard K. Betts, "Wealth, Power, and Instability: East Asia and the United States after the Cold War," *International Security* 18, no. 3 (Winter 1993–1994): 34–77; Denny Roy, "Hegemon on the Horizon? China's Threat to East Asian Security," *International Security* 19, no. 1 (Summer 1994): 149–168; Barry Buzan and Gerald Segal, "Rethinking East Asian Security," *Survival* 36, no. 2 (Summer 1994): 3–21.

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14. David Shambaugh, "China's Military Modernization: Making Steady and Surprising Progress," in *Strategic Asia 2005–6: Military Modernization in an Era of Uncertainty*, edited by Ashley Tellis (Seattle: National Bureau of Asian Research, 2005), 67–103.

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17. Michael Pillsbury, *The Hundred-Year Marathon* (New York: Henry Holt, 2015).

18. Henry Kissinger, *On China* (New York: Penguin, 2011); Hugh White, *The China Choice* (Oxford: Oxford University Press, 2013); Graham Allison, *Destined for War* (Boston: Houghton Mifflin Harcourt, 2017).

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20. See Keith Payne, *Deterrence in the Second Nuclear Age* (Lexington: University Press of Kentucky, 1996); Thérèse Delpech, "Nuclear Weapons and the 'New World Order': Early Warning from Asia?" *Survival* 40, no. 4 (Winter 1998–1999): 57–76; Paul Bracken, *Fire in the East: The Rise of Asian Military Power and the Second Nuclear Age* (New York: HarperCollins, 1999); Colin Gray, *The Second Nuclear Age* (London: Lynne Rienner, 1999). Note that Paul Bracken later expanded his thoughts in *The Second Nuclear Age: Strategy, Danger, and the New Power Politics* (New York: Henry Holt, 2012).

21. The "stability" of the Cold War is often oversold, however. There were major crises during the Cold War, many that brought the two superpowers to the brink of nuclear war, including during the Berlin crisis (1961), the Cuban missile crisis (1962), and the Able Archer 83 command post exercise carried out by the North Atlantic Treaty Organization (1983).

22. Of note, international relations theorists are divided about the effects of multipolarity. Some, such as Kenneth N. Waltz and John J. Mearsheimer, believe that it begets instability, while others, such as Hans Morgenthau and E. H. Carr, think the opposite, that it enhances stability.

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24. Delpech, "Nuclear Weapons and the 'New World Order,'" 74 (emphasis added).

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31. See D. Marc Kilgour and Steven J. Brams, "The Truel," *Mathematics Magazine*, December 1997; Robert E. Harkavy, "Triangular or Indirect Deterrence/Compellence: Something New in Deterrence Theory," *Comparative Strategy* 17, no. 1 (January–March 1998): 63–81. See also Linton Brooks and Mira Rapp-Hooper, "Extended Deterrence, Assurance, and Reassurance in the Pacific During the Second Nuclear Age," in *Strategic Asia 2013–14: Asia in the Second Nuclear Age*, edited by Ashley J. Tellis, Abraham M. Denmark, and Travis Tanner (Seattle: National Bureau of Asian Research, 2013), 266–299; Gregory D. Koblentz, *Strategic Stability in the Second Nuclear Age*, Special Report No. 71 (Washington, DC: Council on Foreign Relations, November 2014).

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