Crisis Instability and US-China Relations: The Present (If Not Clear) Danger

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Two concerns have driven much of the debate about international security in the post-Cold War era. The principal concern has been the potentially deadly mix of nuclear proliferation, rogue states, and international terrorists, a concern that became clearly dominant after the 9/11 attacks.¹ The second concern, one whose prominence has waxed and waned since the mid-1990s, is the potentially disruptive impact of China if it emerges as a peer competitor of the United States, challenging an international order established during the era of American preponderance.² Reflecting this second concern, some have expressed reservations about the dominant post 9/11 security agenda, arguing that China could challenge American global interests in ways that terrorists and rogue states cannot.³ In this essay, I raise a different concern prompted by China’s changing role in the early 21st century. I suggest that a more pressing issue, one to which not enough attention has been paid, is the danger of instability during a Sino-American crisis. For at least the next decade, while China remains relatively weak, the gravest danger in Sino-American relations is the possibility they will find themselves in a crisis that


could escalate to open military conflict. In contrast to the long term prospect for a new great power rivalry between the US and China that ultimately rests on uncertain forecasts about big shifts in national capabilities and debatable claims about the motivations of the two countries, the danger of instability in a crisis involving these two nuclear-armed states is clear and present. It is a danger that rests neither on hypothetical future capabilities nor questionable assumptions about each side’s intentions. In what follows, I identify not just preemptive pressures that could pose the most serious risk during such a crisis, but also related, if slightly less dramatic, incentives to use force that could produce instability.

My discussion proceeds in three parts. Part one explains why, during the next decade or two, a serious Sino-American crisis may be more likely than recognized. Part two examines distinctive substantive features that would characterize plausible Sino-American crises which suggest they may be not only more likely, but also more dangerous, and hence more important than is appreciated by international relations scholars who focus on security affairs, even the more specialized cohort that focuses on the security implications of China’s rise. Part three then


6 As noted below, I am referring to a Sino-American confrontation that would not merely be an episode of increased tension, like the handful that have already occurred since 1995, but instead be a crisis that takes the countries to the brink of war. By this definition, tensions increased, but no crisis was triggered, during the 1995-96 missile tests in the Taiwan Strait, after the US accidentally bombed the Chinese embassy in Belgrade in May 1999, after the collision of the US EP-3 and a Chinese fighter jet in April 2001, after Chinese fishing boats harassed the USNS Impeccable in March 2008, and when the US planned military exercises following the North Koreans sinking of the South Korean ship Cheonan. On the limits to the tensions even during 1995-1996, see Robert L. Suettinger, “U.S. 'Management' of Three Taiwan Strait 'Crises,'” in Michael D. Swaine, Zhang Tuosheng, with Danielle F.S. Cohen, eds., Managing Sino-American Crises: Case Studies and Analysis Washington, D.C.: Carnegie Endowment for International Peace, 2006, pp. 251-92. See also Nie Jun, “Chinese Decision Making in Three Military Actions across the Taiwan Strait,” in Ibid, pp. 293-326.
considers general features of crisis stability in asymmetric dyads like the one in which a US superpower would confront an increasingly capable but still thoroughly overmatched China—the asymmetry that will prevail for at least the next decade. This more stylized discussion clarifies the inadequacy of focusing one-sidedly on conventional forces, as has much of the current commentary about the modernization of China’s military and its implications for potential conflicts with the US in the Western Pacific,7 or one-sidedly on its nuclear forces, as a smaller slice of commentary has.8 It suggests why a Sino-American crisis, even if more likely and more dangerous than generally appreciated, would be neither as unstable as would be expected from an assessment that considers only conventional capabilities, nor as stable as would be expected from an assessment that considers only nuclear capabilities.

Before proceeding, however, I need to clarify my use of the terms “crisis” and “stability.” For the purposes of this essay, a crisis is defined as a confrontation between states involving a serious threat to vital national interests for both sides, in which there is the expectation of a short time for resolution, and in which it is understood there is a sharply increased risk of war.9 This distinguishes crises from many situations to which the label is sometimes applied, such as more protracted confrontations (e.g., the long-running dispute about the North Korean nuclear program), sharp disagreements over important matters that are not vital

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7 For one such exchange of contrasting views, see Aaron L. Friedberg and Robert S. Ross, “Here Be Dragons,” National Interest, no. 103 (2009), pp. 19-34.  
interests and in which military force seems irrelevant (e.g., trade disputes, clashes over climate change), and political disputes involving vital interests, even those with military components, that present little immediate risk of war (e.g., enduring rivalries focused on disputed territory or political spheres of influence such as Kashmir, the Golan Heights, and the Cold War standoff between NATO and the Warsaw Pact in central Europe).

In a crisis as defined here, states must decide whether their interests are best served by continuing to bargain, or by escalating to the use of force. Stability, for the purposes of this essay, is defined as the temptation to resort to force in a crisis.¹⁰ Crisis stability is greatest when both sides strongly prefer to continue bargaining; instability is greatest when they are strongly tempted to resort to the use of military force. Stability, then, describes a spectrum—from one extreme in which neither side sees much advantage to using force, through a range of situations in which the balance of costs and benefits for each side using force varies, to the other extreme in which the benefits of using force so greatly exceed the costs that striking first looks nearly irresistible to both sides. While the incentives to initiate the use of force may not reach this extreme level in a US-China crisis, the capabilities they possess suggest reasons to worry that escalation pressures will exist and that they may be highest early in a crisis, compressing the time frame for diplomacy to avert military conflict.

I. Sino-American Crises: Likely?

More likely than war, more than just Taiwan

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The running debate about the long term implications of China’s rise is not just an unfortunate diversion from the more urgent challenge facing the US and China today—the risk of a war-threatening crisis. It is also a somewhat surprising diversion since near-term concerns about military conflict while China remains relatively weak were described over a decade ago by Thomas Christensen in a widely cited article.\textsuperscript{11} To be sure, Christensen’s arguments about the potential for asymmetric conflict that could involve China and the US did result in analysts paying more attention to the weapons and strategies Beijing was developing to cope with continued US superiority in the event of military conflict. But it did not result in a closer focus on the prospects for Sino-American crises, as opposed to conflicts. Such a focus is warranted for two reasons.

First, the attention to what many view as unlikely, though potentially catastrophic, warfighting in a sense puts the cart before the horse. A crisis would not only be likely to precede any significant military action; it would also be accompanied by the risk of grave consequences from the use of force even if war were ultimately avoided. Although escalation risks have been noted in the now voluminous literature comparing Chinese and American military options, usually when invoking concerns about controlling escalation once military force has been used, the prior question of the initial escalation to the use of force has not been adequately treated.\textsuperscript{12}

Second, there is (fortunately) not yet any experience of wars between nuclear-armed great powers from which to draw lessons. Since the 1950s, of course, scholars and policymakers have speculated about and planned for a wide variety of contingencies that cover the way

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\textsuperscript{12} The most thorough effort at exploring US-China crises to date, though one that adopts a broader definition of crisis than the one used here, is Swaine and Zhang, \textit{Managing Sino-American Crises: Case Studies and Analysis}. On China’s post-Cold War shift in emphasis during crises from preparing for the use of military force to seeking to forestall its use, see Zhang, “Zhongguo Guoji Junshi Anquan Weiji Xingwei Yanjiu,” pp. 113-114.

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such wars might be conducted. Unlike speculation about warfighting in the absence of evidence, however, the literature about crisis stability is at least partly informed by the actual experience of crises between the two nuclear-armed great powers that occurred during the Cold War. This literature can serve as a starting point for thinking about the stability of crises that could ensnare the US and China.

In restricting my focus to crises, then, my approach is in one sense narrower than that of Christensen in his 2001 article and much of the subsequent literature that has examined contingencies for the use of military force, especially in the Taiwan Strait. In another sense, however, my focus is broader, inasmuch as I look at factors that would affect the stability of a wider range of crises that could involve the US and China over the next decade or two. The attention that has been paid to Taiwan scenarios is not surprising given China’s own close focus on this contingency, especially at the turn of the century. Today, however, additional East Asian theaters (mostly maritime) present clear risks for crises and conflicts that could engage the US and China. Indeed, some might argue that the probability of a Sino-American crisis elsewhere has risen, while the probability of a military confrontation over Taiwan’s fate has diminished.13

Cross-Strait relations have improved significantly in recent years and, since 2003, the US has

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more definitively stated that it does not support Taiwan independence—the most likely trigger, as Christensen explained, for China to resort to force even in the face of superior American capabilities. 14 Yet, although it is now a less acute a problem than was the case a decade ago, because of the magnitude of the military actions that could result from a crisis in the Taiwan Strait, it remains a low probability event that continues to warrant close attention.

In contrast with the situation Taiwan Strait, the possibility that the US and China could find themselves in a crisis triggered by disputes in the South China Sea or the East China Sea has increased. Since 2005, a period of relatively low tension over sovereignty claims to maritime territories and seas in East Asia has given way to growing concern about the willingness and ability of China and its neighbors to resolve their differences peacefully. 15 Beijing refuses to rule out the use of military force as the ultimate means for ensuring claims to what it views as sovereign territory and adjacent waters. While the US is not a principal in any of these vexing regional disputes, Washington has clearly stated its principled opposition to the use of force to

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resolve such matters and, more to the point, has treaty commitments to two of the countries (Japan and the Philippines) contesting China’s claims, and increasingly close ties with a third (Vietnam). The potential implications are clearest in the East China Sea. The US has explicitly indicated that its military commitment under the US-Japan security treaty extends to all territories administered by Tokyo, including the key disputed islands (usually referred to as the Senkaku islands by Japan, and the Diaoyu islands by China).

In addition, disagreements have intensified between China and the US over American military forces operating in the international seas and airspace near China. The US insists on its longstanding interest in freedom of navigation in and above waters beyond the 12 mile territorial limit that it defines as the high seas. China, by contrast, asserts that the waters in which unrestricted freedom of navigation extends to military vessels begins only outside the country’s EEZ— precluding unconstrained US air and naval operations beyond 12 miles but still within the 200 mile limit. This disagreement is not a merely an academic dispute about international law, both customary maritime law and the terms of UNCLOS (which China has ratified but the US has not). On the contrary, US naval vessels and aircraft conduct intelligence gathering activities in and above the waters within China’s EEZ that both sides know have important military

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implications. Moreover, the prospect for confrontations resulting from this disagreement is more
than just conceivable; there have already been several publicly reported incidents.\(^{19}\) These
incidents have precipitated angry standoffs between Chinese and American vessels, followed by
each side restating its principled position\(^{20}\) They have also precipitated more frightening
consequences (as in the case of the EP-3 collision with a trailing Chinese fighter jet that resulted
in the death of the Chinese pilot and the emergency landing of the aircraft on Hainan followed by
tense and difficult negotiations to release the American crew and aircraft).

The fundamental disagreement between the US and China about rights of passage
through and over maritime areas may also have volatile implications for vital SLOCs in the
South China Sea near territories that Beijing claims as its own. The extensiveness of China’s
claims to the Spratlys in particular could provide a basis for insisting that much of the South
China Sea falls within China’s EEZ requiring foreign military vessels to seek Beijing’s consent
before passing through its sea lanes.\(^{21}\) The sensitivity of this issue and its potential for Sino-
American friction, was underscored during a 2010 ASEAN Regional Forum in Hanoi when
China’s foreign minister reacted in an unexpectedly harsh way to Secretary of State Clinton’s
rather mild diplomatic expressions of American hopes for a peaceful resolution of sovereignty

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\(^{19}\) See Swaine and Fravel, “China’s Assertive Behavior, Part Two”. See also Fravel’s description of China’s use of
nonmilitary ships to assert its maritime claims. This practice could embolden China to act in ways that seem safer,
but actually run the risk of provoking a reaction from other claimants that could escalate and trigger a crisis
(“China’s Military Rise,” p. 31).

\(^{20}\) On the March 8, 2009 harassment of the USNS *Impeccable*, see Andrew S. Erickson and Michael Chase, “An
Undersea Deterrent?,” *U.S. Naval Institute Proceedings*, vol. 135, no. 6 (2009), pp. 36-41.

\(^{21}\) For a variety of American and Chinese perspectives on rights within and over the EEZ, especially relevant
perspectives on maritime law, see Dutton, *Military Activities in the EEZ*. China denies that its claims would affect
freedom of navigation through the South China Sea, though it has not yet clarified the extent of its claims or the
implications for the transit of military vessels.
disputes in the South China Sea and her suggestions that multilateral forums could be useful in this regard.22

Planning for military contingencies in these maritime settings shapes the forces that the US and China deploy and their likely uses in the initial stages of fighting if that becomes necessary, something much of the existing literature has addressed. My focus is on the pressures that would face China and the US in a crisis their disagreements could trigger as they choose between continuing to bargain or initiating the use of force. Force deployments and planning will, of course, affect their choices and the likelihood that such a confrontation escalates to military action before a diplomatic solution is achieved.23 But during a crisis, at least during one that is not merely engineered as a pretext for launching a war, the adversaries will share an interest in discovering an acceptable resolution of their differences without fighting. As the now extensive literature about bargaining theories of war indicates, for a variety of reasons (e.g., informational and commitment problems, difficulties in devising workable compromises that reflect the nature of the issue in dispute) states may be unable to discover a


23 The cold war literature about the effects of nuclear forces and doctrine on deterrence stability, for example, identified the tension between a force structure optimized for deterrent stability (desirable during a crisis before war begins) and one optimized for limiting the costs of warfighting (desirable if deterrence fails). Forces that might limit damage or provide incentives for restraint during a nuclear exchange once war begins, critics argued, reduced the stabilizing fear of uncontrolled escalation and unacceptable damage that discouraged the use of force during a crisis. See Lawrence Freedman. The Evolution of Nuclear Strategy. New York: St. Martin's Press, 1981; Fred Kaplan. The Wizards of Armageddon. New York: Simon and Schuster, Inc., 1983.
diplomatic solution.\textsuperscript{24} During a crisis, however, the search is on and it is intense. The states’ incentives to use force and the time pressures they face-- incentives and pressures that can short circuit diplomacy and lead to military conflict-- will determine the degree of crisis stability.

**US-Soviet vs. US-China Crises**

To assess the risks of crisis instability, I draw in part on ideas that emerged during the Cold War. This approach does not, however, rest on a belief that the US-China relationship in the current era is as clearly adversarial as the Soviet-American relationship was.\textsuperscript{25} Instead, I invoke ideas about crisis stability generated during the Cold War because of the relevance of their logic and because the Cold War experience suggests insights into the choices that national leaders face when they find themselves locked in a crisis. But, in applying these ideas about crisis stability, it is necessary to take into account some of the important ways the contemporary US-China case differs. Perhaps counter-intuitively, these differences suggest additional reasons why US-China crises may be more likely than generally recognized. The risk of a serious Sino-American confrontation exists despite, and perhaps is underappreciated because of, the absence of the sort of zero-sum, life-and-death struggle between two archrivals that characterized Soviet-American relations for most of the Cold War.

As armed adversaries, the US and the Soviet Union clearly expected their opposed interests would generate crises. Over time, this recognition encouraged both sides to work harder to anticipate and avoid such risky confrontations and to improve their ability to manage them when they occurred. This salutary trend was not just the result of intellectual enlightenment and prudence; it was also catalyzed by nerve-rattling experience.


\textsuperscript{25} On the contrary, China and the US have robust economic ties and cooperate on a range of international issues, reflecting common interests that shape a bilateral relationship that is far from zero-sum.
During the first fifteen years of the Cold War, Washington and Moscow had faced the danger of military escalation in three crises over the status of Berlin and one over the issue of Soviet nuclear forces in Cuba. Through these frightening experiences both sides reluctantly came to accept that they could not directly challenge what were understood to be the other’s vital interests beyond their homeland without triggering a confrontation that could escalate to war. And because the different but obviously awesome capabilities of the two superpowers ensured that each could inflict unacceptable damage on the other, this risk of war was to be avoided. Whatever disagreements the Soviets and the Americans had about the legitimacy or desirability of the post-WWII order, by the mid-1960s both had learned that they could not safely challenge a European status quo basically defined by the location of their armies at the conclusion of WWII, nor a status quo in the Western hemisphere fundamentally defined by the writ of the Monroe Doctrine— US vital interests precluding the deployment in Latin America or the Caribbean of foreign military forces that could jeopardize American security.

The growing Soviet and American recognition of an international status quo in areas where each had vital interests reduced the probability of actions triggering major crises.26 No similarly shared understanding has yet been reached in the case of China and the US. Most importantly, there is much less clarity about the delimitation of both US and Chinese vital interests beyond their homelands in the Western Pacific. Ambiguity has been reflected in China’s varying statements about its “core interests” aside from the territorial and political integrity of its recognized borders on the mainland and its relatively clear claim to Taiwan.27 Ambiguity has also been reflected in America’s very broadly construed position on the future of

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Taiwan as well as on the resolution of maritime-territorial disputes in the East and South China Seas.

Vagueness or uncertainty about “red lines” that cannot be crossed without risking conflict increases the possibility that states may take steps which elicit an unexpectedly firm response. Such actions can trigger a crisis because they sometimes clarify previously vague interests that states decide they are actually quite determined to ensure. Uncertainty about issues for which the adversary would dare run the risk of escalation to military conflict could lead China or the US to act in ways they believe are safe because they merely solidify a status quo conforming with their understanding of each side’s vital interests. But because the red lines are not clear, the other side might instead view such steps as provocative, triggering a crisis.

The danger of actions that unexpectedly trigger a Sino-American crisis resulting from ambiguity about the definition of vital interests might seem least likely to be a problem in the Taiwan Strait. After all, both sides seem content to accept the status quo for now. Unfortunately, even in this seemingly least problematic case dangerous ambiguity prevails. Beyond their current acceptance of the status quo, their positions differ. China’s embrace of the status quo is contingent on preserving the possibility of national unification. The US insists that

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28 It took the North Korean invasion of South Korea and Iraq’s invasion of Kuwait to clarify American thinking about the extent of its interests in 1950 and 1990. Moreover, even if a tacit understanding about today’s status quo in Asia could be reached, its durability would be questionable. The European postwar order partly reflected the major Soviet role as a victorious ally in WWII; Asia’s security order was established when China was unable to wield much influence. That alone may make China less willing to accept the order’s immutability as it grows stronger.

29 Christensen suggests another reason to worry about the distinctive dangers inherent in a Sino-American crisis resulting from disagreements about the status quo. Drawing on prospect theory and its application to international relations pioneered by Robert Jervis, Christensen indicates that if both sides believe they must act to avoid losing what is rightfully theirs, they are both willing run substantially higher risks than they would be if they were trying to gain what is not yet theirs. See Thomas J. Christensen, “The Meaning of the Nuclear Evolution: China’s Strategic Modernization and U.S.-China Relations,” March 12, 2011, unpublished manuscript, p. 21. The de facto status quo in East Asia is clear. Problems could arise, however, because of disagreement about the de jure status quo. For example, China’s actions to prevent an erosion of its formal sovereignty claims—especially over Taiwan but possibly over its claims to territory in the East and South China Seas—might be seen by the US as a challenge to its position opposing unilateral attempts to alter the de facto status quo. If so, prospect theory suggests both sides would be motivated to run great risks because both would believe they were operating in the “domain of losses.”
the de facto political separation under the status quo must endure unless a change is peacefully agreed to by people on both sides of the Taiwan Strait. This ostensibly small difference opens the door to miscalculation that could trigger a crisis. Indeed, recent experience may actually be increasing the danger that both sides underestimate the chance that actions they see as supporting the status quo would instead be viewed as a challenge.

In 1995-1996, Beijing was frustrated by its lack of military options for discouraging perceived US complicity with a strengthening independence movement on Taiwan. Since then, China has deployed more and better forces along, in, and over the Strait mainly to credibly signal its determination to prevent challenges to its vital interest in preserving the status quo (for Beijing, formal sovereignty over Taiwan that it cannot yet exercise). These deployments, especially the buildup of missiles across from Taiwan, have elicited sharp criticism from Washington, which routinely labels them a threat to peace and stability. The US, for its part, has stuck to a policy of periodically providing Taiwan with arms to signal its determination to prevent challenges to America’s vital interest in preserving the de facto status quo (for Washington, continuation of the island’s political autonomy as long as its residents want it). China has sharply criticized these US arms sales as interference in its internal affairs that unhelpfully emboldens Taiwan separatists who threaten the peaceful status quo. The rhetoric from both Beijing and Washington might seem to clearly signal that each side’s actions are provocative and could trigger a crisis. Yet, neither side has seemed much concerned that they have actually been running a very serious risk. So far, experience has reinforced this belief.
Unfortunately, the seemingly safe and accepted pattern that has prevailed does not necessarily reduce, and may actually increase, the dangers of a crisis emerging in the Strait going forward.\(^\text{30}\)

Precisely because of recent experience, China and the US may overestimate how safe it is to test the limits of each other’s tolerance. When political tensions over the future status of Taiwan have spiked, both sides have exercised restraint. However welcome, such restraint may also be contributing to an underestimation of risks. After the 1995-96 episode, tensions again increased in the run-up to the 2004 re-election bid of Taiwan’s president, Chen Shui-bian. In 2003, China began issuing sterner warnings and threats about potentially dire consequences if the Taiwanese electorate supported Chen’s legislative proposals which Beijing viewed as unacceptable steps towards de jure independence. China’s statements sharply escalated tensions with Taiwan, elicited criticism from the US, and generated speculation about whether Beijing and Washington would soon find themselves locked in a war-threatening crisis. They did not. On the contrary, cross-Strait tensions quickly diminished when US President Bush publicly criticized the proposals pushed by President Chen (and his provocative agenda which Taiwan’s parliament and voters ultimately rejected).

The US, of course, did not condone China’s coercive diplomacy. On the contrary, Washington criticized it. But the American response suggested that Beijing’s sterner stance would not necessarily elicit actions that greatly increased the danger of confrontation. To the extent Beijing saw that experience, like America’s resigned acceptance of China’s military buildup in the Taiwan theater, as setting a precedent, the chances for miscalculation that produces a future crisis increase. It contributes to overconfidence in Beijing about its grasp of the risk it runs when adopting strong measures to prevent what it defines as Taiwan’s unacceptable

challenges to the status quo. However, under different, quite plausible, circumstances— if the Taiwanese electorate becomes more supportive of a policy on sovereignty that is unacceptable to Beijing, or if the US becomes less willing to rein in a Taiwanese leader who enjoys greater popular support than did Chen Shui-bian—a repeat performance could instead trigger a firmer American response that precipitates a crisis.

Similarly, recent events may breed American overconfidence that its actions are acceptable to Beijing rather than potentially provocative. Each announcement of an arms package for Taiwan, sales that Washington sees as necessary to discourage unilateral Chinese efforts to alter the status quo, has elicited strong protests from Beijing and ominous warnings about dire consequences, sometimes combining the rhetoric of outrage with tangible steps to signal anger (such as restricting or canceling Sino-American military exchanges or selected commercial deals). But in each instance, Sino-American relations have regained a more solid footing without push coming to shove. Such experiences encourage a belief that China’s reaction signaled not resolve but restraint, and that US arms sales do not entail running much risk of actually triggering a dangerous crisis. This belief fits with a more general American view that China’s interest in preserving a robust economic relationship with Taiwan and good relations with neighboring states and major trading partners, including the US, constrains Beijing to limit its response to largely symbolic protests. Yet, the reliability of this belief is questionable.


Analysts in the West and within China seem to agree that the leaders in Beijing are becoming more sensitive to domestic political pressures. These present constraints quite different from those of international economics and diplomacy that have thus far encouraged cautious behavior that has belied Beijing’s harsher rhetoric. Such pressures may mean that the risk of future arms sales triggering a crisis is higher than believed.

In particular, the overheated nationalist sentiments and jingoism that circulate on the internet and other social media, and that appear in unofficial publications, could pressure a divided or insecure CCP leadership to decide that “this time” it needed to send a more convincing signal of determination and displeasure over American arms sales to Taiwan.\(^{33}\) Especially if, as suggested above, Beijing believed that past American responses had signaled Washington’s reluctance to risk a crisis over Taiwan, even relatively cautious leaders in China might decide that new, more assertive actions designed to mollify domestic political pressure were both necessary and safe. The temptation to embrace a dramatic new option would be strengthened if China’s leaders also believed that they could portray their action -- perhaps a decision to deploy ships near Taiwan and declare China’s right to inspect cargos entering its territorial waters-- as a justifiable and relatively restrained response, given that Washington had ignored Beijing’s many previous warnings about the unacceptability of arms sales. If so, American arms sales that the Washington had believed were a safe way to signal US determination while eliciting little more than pro forma condemnations form Beijing, will have

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provoked an unprecedented, unexpected Chinese reaction with the clear potential to trigger a Sino-American crisis.

II. Sino-American Crises: Dangerous?

Chinese and American beliefs that the other is unlikely to respond in ways that risk a war-threatening crisis increase the chances that they will stumble into one. Moreover, if that happens, there are reasons to expect that such a crisis could be as dangerous as, and perhaps more dangerous than, those the US and the Soviet Union peacefully managed during the Cold War. Some of these reasons again reflect substantive differences between the situation the US and China face today and the situation that the US and Soviet Union faced in the last century. I highlight five of these differences and their implications for the dangers in plausible US-China crises.

**Crisis Communications.** First, China and the US have not yet jointly accumulated the hard lessons of experience which Soviet and American leaders learned only after managing nerve-wracking crises early in the Cold War when preferences, doctrine, and contingency planning bumped up against the reality of tough choices with real consequences. Absent that experience, especially on the Chinese side, Sino-American crises may well prove to be more like the dangerous Soviet-American confrontations of the early Cold War years, than the less alarming ones that followed after 1962.34

The centrality and difficulty of crisis communications especially evident early in the Cold War, raises troubling concerns about the way a Sino-American crisis might play out. The most

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34 China has not been in a war-threatening crisis since 1969, and has not been in major combat since 1979. This raises a host of questions about inexperience among political leaders, military officers, and soldiers that could affect behavior. China’s military training is reportedly more realistic than in the past. But it is unclear that even the most realistic training is as sobering as the experience of crises or combat for understanding the complications and unpredictability of encounters with a determined adversary. For a brief survey of China’s experience with and limited learning from military-security crises, see Zhang, “Zhongguo Guoji Junshi Anquan Weiji Xingwei Yanjiu.”
serious US-China confrontations thus far (following the US accidental bombing of the Chinese Embassy in Belgrade in 1999 and the 2001 collision between a Chinese fighter jet and a US EP-3 reconnaissance aircraft) cast doubt on the adequacy of existing channels of crisis communication. Despite the availability of a hotline established in 1998, on both occasions the US had difficulty making direct contact with China’s top leadership in as timely a fashion as a potential crisis demands. Whether because China’s leaders are reluctant to use the available channels for top-level contacts until they have reached an internal consensus, or until they have consulted widely with the relevant military units, or because their policy coordination is hampered by the lack of a counterpart to the American NSC, recent experience suggests frustrating delays in direct communication are likely during what, as explained below, could be the crucial early moments of an unfolding crisis with the US.35

At the very beginning of a crisis, if not longer, communications may be limited to public statements or tacit signals sent through actions. Such methods are imperfect for reasons that are well known. The usefulness of public statements is constrained by the recognition that multiple audiences (domestic and international) are being addressed. Even though an interest in exploiting audience costs may sometimes make this an attractive way to send credible signals of

35 China’s initiated steps to improve its crisis management after the 1999 Belgrade Embassy bombing. It established a “national security leading small group.” Since then, however, it has not been the key body for crisis decision-making, which remains focused on the Standing Committee of the CCP’s Politburo but often includes additional central party, state, and military actors. See Ibid., pp. 115-116. In 2008, China also agreed with the US to add a second hotline linking defense departments. The principle of civilian control in both countries, however, makes it unlikely that direct military communications could be a primary locus for managing a crisis in its earliest moments while political leaders on both sides are struggling to assess the nature of the challenge they face. On this complication for US-China crisis communications, see Kurt M. Campbell and Richard Weitz, “The Chinese Embassy Bombing: Evidence of Crisis Management?,” in Swaine and Zhang, eds., Managing Sino-American Crises, see esp. pp. 338, 347 n42.; Wu Baiyi, “Chinese Crisis Management During the 1999 Embassy Bombing Incident,” in Ibid., pp. 358-9; Blair and Bonfili, “The April 2001 EP-3 Incident,” in Ibid., pp. 380, 387; cf. Zhang, “The Sino-American Aircraft Collision,” in Ibid., pp. 395, 410, 414; Michael D. Swaine, “Conclusion: Implications, Questions, and Recommendations,” in Ibid., pp. 424-426, 448-449. On coordination problems for China when managing maritime disputes, see Swaine and Fravel, “China’s Assertive Behavior, Part Two, p. 32n.79; also Zhu “Nanhai Zhengduan.” On the imperative for centralized control in crises between nuclear armed states, see Snyder and Diesing, Conflict among Nations, p. 452.
resolve, a competing interest in controlling escalation may require messages that are more effectively sent through confidential channels. The usefulness of tacitly signaling through actions rather than words is also problematic. Its reliability and effectiveness depend on both the clarity with which the sender’s message is translated into action and the probability that the recipient interprets the signal as intended. Technical or administrative problems in the chain linking the two sides can produce distortion or misperception. If China and the US wind up relying on public proclamations and tacit signaling during a crisis, their approach would be reminiscent of the sort of communications that prevailed during the early, more dangerous Soviet-American crises from the late 1940s through Cuba in 1962. Dissatisfaction with such meager channels of communications, and the dangers of tacit signaling recognized during the Cuban Missile Crisis, was an important impetus for establishing the original hot line between Washington and Moscow in 1963.

More troubling still are indications that Chinese analysts overestimate the ease with which military actions can be used to send signals, and underestimate the escalation risks that could result if the signaling action goes awry or is misunderstood. At least three of the
envisioned uses of the much discussed Chinese Anti-ship Ballistic Missile (ASBM)—increasingly identified as a potential “game-changer” in US-China maritime confrontations—are illuminating in this respect.39 Two are equivalent to “shots across the bow.” The ASBM’s maneuverable warheads would be sent either just over an American carrier and its escorts or be targeted to splash down on one side to indicate the direction away from which the ships should steer. In some ways, this would be an updated version of a technique China used in 1995-1996 when it conducted missile exercises that impacted sites well offshore key ports on Taiwan. Although those simpler missile launches, aimed at open waters and preceded by announcements that warned ships to avoid the test area, carried some risk of accidentally hitting unintended targets, the operation did not require anywhere near the level of precision that would be necessary to strike near but still miss all the elements of a moving carrier battle group. As Owen Cote notes, even a fully operational ASBM capability that performs to specifications will have a margin of error determined not only by the warhead’s terminal guidance, but also by the time that passes between tracking, targeting, launching, and impact.40 If the intent were to hit the ships, the Chinese could compensate for this error by launching multiple salvos and combining

39 The ASBM, expected to be a modification of the DF-21 MRBM, would be a landbased missile with a maneuverable warhead that could adjust its course to compensate for its target’s movement and perhaps to foil missile defenses. Its principal mission is to threaten US carrier battle groups in parts of the western Pacific of concern to China. For discussion of the ASBM program, including descriptions of strategies for its use contained in authoritative Chinese sources such as, The Science of Second Artillery Campaigns, see Andrew S. Erickson and David D. Yang, “On the Verge of a Game-Changer,” U.S. Naval Institute Proceedings, vol. 135, no. 5 (2009), pp. 26-32; Idem., “Using the Land to Control the Sea?,” Naval War College Review, vol. 62, no. 4 (2009), pp. 53-86. For a useful exploration of the many hurdles that China must clear before the ASBM is effective, see Eric Hagt and Matthew Durnin, “China’s Antiship Ballistic Missile,” Naval War College Review, vol. 62, no. 4 (2009), pp. 87-115. Despite the daunting challenges in deploying the kind of system that no other country has yet mastered, the development effort itself, and the unusually public discussion about it in the Chinese open literature are already having a strategic effect in shaping US planning and behavior. In a crisis, even an unproven ASBM capability could dissuade the US navy in ways the Chinese intend, or it could contribute to instability by increasing the incentives for both the US and China to use force early for the reasons discussed here. See Erickson and Yang, “Using the Land,” pp. 53-54. See also Tony Capaccio, “China’s Anti-Ship Missiles Aren’t Effective Yet, U.S. Navy Says,” Bloomberg Business Week, January 4, 2011, http://www.businessweek.com/news/2011-01-04/china-s-anti-ship-missiles-aren-t-effective-yet-u-s-navy-says.html.

them with attacks using other kinds of missiles from land, air, and sea-based platforms. But when the intent is to frighten, coerce, and signal without actually striking the ships, redundancy is counterproductive. Indeed, even the smallest salvo entails accepting the risk that targeting error can result in unintended escalation.

The other signaling role envisioned for the ASBM during a crisis is to have the warheads hit specific parts of the carrier itself (such as the command tower) to warn of increasing danger while also demonstrating Chinese restraint, perhaps by relying on submunitions less likely to destroy the carrier and its aircraft. To an even greater extent than a shot across the bow, but for the same technical reasons, this use would run the unavoidable risk of a destructive attack that sends a more provocative message than intended, resulting in inadvertent escalation.

**Stark Asymmetry.** Second, the balance of military capabilities is much more lop-sided in the contemporary Sino-American dyad than it was between the US and USSR. Both China and the US recognize the profound asymmetry (along quantitative and qualitative dimensions) in conventional and nuclear capabilities favoring the US that would bear on crisis behavior. The extent to which this conventional and nuclear imbalance favoring the US would increase instability in a Sino-American crisis by increasing the incentives to initiate the use of force will be addressed further in part three below when I examine general features of crisis stability under conditions of asymmetry.

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41 Erickson and Yang, “Using the Land,” p. 61
42 See Ibid., pp. 62-63. See also comments from dissenting Chinese analysts who argue that the risks of unintended consequences would inhibit the Chinese from using the ASBMs in a crisis or conflict (Ibid., pp. 67-69).
43 Although the strategic nuclear balance favored the US during the Cold War, especially in the early decades the Soviet Union held a significant advantage in conventional military forces arrayed near the central front dividing Europe (especially around Berlin). Moreover, Soviet nuclear capabilities were sufficiently robust that America’s best designed disarming first strike could not provide confidence in preventing unacceptable retaliation. Even optimistic RAND scenarios for effective counterforce first-strikes could not guarantee high confidence that the US homeland would escape devastating damage. See Freedman, *The Evolution of Nuclear Strategy*; Kaplan, *Wizards of Armageddon*. 
Strategic Beliefs. Third, unlike the Soviet Union, China’s public statements and official policy appear to reflect a growing belief in the stability-instability paradox. This paradox indicates the continued relevance of conventional military conflict, even between adversaries with nuclear weapons. Stability at the strategic-nuclear level, it claims, opens the door to conflict at lower (especially conventional) levels since both sides readily understand that the likelihood of mutual devastation precludes resort to general nuclear war. As long as rationality prevails, each has a self-interest in restricting itself to conventional conflict or very small, carefully calibrated, nuclear strikes. In short, the paradox suggests that stability at the highest level of general nuclear war increases instability at lower levels of conflict by making lesser conflicts safe to fight.44

In the first fifteen years of the Cold War when the US and the Soviet Union faced their gravest crises Soviet leaders repeatedly rejected this idea, ultimately embraced by the US during the early 1960s, and instead indicated they would observe no restrictions on the military means they used if war came. By contrast, China’s strategic analysts have recently begun to embrace the logic of the stability-instability paradox when they assert that the fear of China’s nuclear capabilities will limit the American willingness to escalate in a military confrontation.45 Moreover, China’s official nuclear no-first-use policy that guides the military’s preparation and training for conflict may reinforce a belief in the paradox.46 To the extent Beijing thinks escalation, especially nuclear escalation, can be controlled because the adversary understands

that China would not be the first to use nuclear forces, it may not only be more willing to take
steps that risk triggering a crisis; as discussed below, it may also underestimate the dangers
inherent in using conventional military forces during a crisis. The combination of China’s
strategic beliefs about escalation and its no-first-use doctrine may, then, make crises both more
likely and more dangerous.

Technology. Fourth, developments in technology since the third quarter of the twentieth
century have improved the offensive conventional military capabilities available to states.47
Given the conventional capabilities in the European theater during the Cold War, the strategic
advantage that would derive from striking first, especially during a Soviet-American crisis in
which both sides were mobilized, was far from clear. Put otherwise, the weapons available did
not clearly confer a decisive edge to either offense or defense.48 For the US and China in the
early 21st century, although the US has a huge quantitative and qualitative advantage in military
equipment, both sides possess capabilities that are much more effective, indeed perhaps only
effective, if used to attack before the other side has attacked or adopted countermeasures.

In particular, to the extent the effectiveness of the most advanced conventional weapons
is tied to sophisticated C4ISR networks that can be degraded through kinetic strikes or electronic
and cyber warfare, their distinctive usefulness for striking the adversary, or for signaling resolve
and warning of escalation, may evaporate once the ability to confidently track and target is

47 For discussion and debate about the significance of the offense/defense distinction, see Robert Jervis,
Glaser and Chaim Kaufmann, “What Is the Offense-Defense Balance and Can We Measure It?,” International
48 The lack of clarity was reflected in the inconclusive debates that were never settled by the test of actual combat.
damaged. The weaker Chinese side will have a powerful incentives to use their most sophisticated capabilities before the integrity of elements essential to their command and control is compromised. This may induce pressures to use force first that are as great as those induced by more traditional concerns about losing the weapons themselves.\textsuperscript{49} The stronger US side, too, could face an incentive to act first, though its considerations would be different. Because of redundancy in American surveillance and targeting methods, together with its dominance of the seas and skies well off the Chinese coast, the US military is actually less dependent than China on the most vulnerable space-based C4ISR components for the effectiveness of its wider array of more advanced military weapons.\textsuperscript{50} As a consequence, the US would face an incentive to strike first against China’s satellites that could outweigh the incentive to exercise restraint as a way to encourage China to refrain from ASAT attacks of its own.

If China’s touted ASBM system becomes truly operational, the American incentive to attack China’s C4ISR, and China’s incentive to use its best forces before its C4ISR is attacked, could become a crucial consideration. The ASBM’s effectiveness beyond the “first island chain”\textsuperscript{51} will be critically dependent on timely satellite reconnaissance. In this operating environment farther from China’s coast, the US enjoys air and naval dominance and, unlike China, has alternatives and backups if space based assets are lost. In a crisis, then, especially one where military hostilities seem imminent, China will face pressure to consider using its ASBM

\begin{footnotesize}

\textsuperscript{50} On US advantages reflecting its air superiority in the operating environment beyond the first island chain, and the implications for an American, rather than a Chinese, temptation to attack satellites, see Cote, “Assessing the Undersea Balance between the U.S. and China,” pp. 24-26.

\textsuperscript{51} Roughly defined by Japan, Taiwan, the Philippines, and the Greater Sunda Islands. But see n.55 below.
\end{footnotesize}
while it still can, knowing that the US has a strong incentive to knock out China’s space-based sensors before they can guide an attack.  

Geography. Fifth, geography where the most plausible US-Chinese crises would emerge—maritime settings in the Western Pacific and seas adjacent to the Chinese mainland—suggests dangers in US-China crises that distinguish them from the US-Soviet experience, which principally focused on continental contingencies.

In particular, the implications of maritime geography for the usefulness of China’s improving submarine forces will require some fateful choices early in a crisis. China’s small ballistic submarine fleet and its larger, more rapidly growing, quieter, and increasingly lethal attack submarines, including those armed with missiles that can pose serious threats against US surface ships, are most secure when they remain in the shallow and noisy littoral waters near the mainland. As long as they remain there, poor acoustics complicate the effectiveness of generally superior American undersea ASW capabilities, while proximity to Chinese land-based aircraft and air defenses complicate US airborne and surface ASW operations. But for China’s submarine forces to play their key roles in a Sino-American crisis they must move south and east, out of these safer littoral waters.

The role of China’s SSBNs is to enhance the deterrent threat of nuclear retaliation. To fulfill this role, China’s SSBNs need to leave their coastal bastion. This is necessary because of their distinctive contribution to deterrence. Until the SSBN fleet grows larger and China is able

52 Chinese satellites are likely to be more tempting targets than vulnerable OTH-backscatter radar sites, another crucial command and control asset. Destroying the radar installations would require an attack on the Chinese mainland, a step that would constitute a more dramatic escalation of a Sino-American crisis or conflict than attacks restricted to air, sea, and space outside of China’s sovereign territory. Attacks on land-based sites would also require accepting the likelihood of Chinese casualties, something obviously avoided with strikes against satellites.

to keep part of its force routinely on patrol in distant waters, its principal contribution to China’s nuclear deterrent is not the incremental addition of survivable warheads (the much larger fraction of which will continue to be based on land-mobile systems) but its usefulness as a hedge against American missile defenses whose effectiveness would be challenged by the less predictable trajectories of widely dispersed SLBMs. This requires their deployment in more distant waters, a requirement also for China’s attack submarines. The role of China’s conventionally armed submarines is to increase the dangers confronting American naval forces as they approach areas China contests. To do this, they must leave coastal waters so that they can discourage US naval forces from reaching the point where they can rely on superior long-range power projection capabilities to threaten China while still out of reach of China’s counterpunch.

In short, the main strategic missions for China’s nuclear and conventional attack submarines require them to exit the “shallow waters…the littoral seas like the northern part of the South China Sea and the East China Sea where the continental shelf extends outward from China’s coast all the way to the First Island Chain” (roughly defined by Japan, Taiwan, the Philippines, and the Greater Sunda Islands). But this means that in a crisis, China faces a choice between maximizing the survivability of its submarines by keeping them in nearby waters, or maximizing their coercive impact by moving them out to deeper seas. If they move out, they can fulfill their mission to raise the risks that the US and its navy confront. However, moving out requires China’s submarines to face superior American ASW operations no longer constrained by the poor acoustics in coastal waters or land-based Chinese aircraft and anti-air

55 See Cote, “Assessing the Undersea Balance between the U.S. and China,” p. 6. The usage of “island chains” is imprecise and contested. Cote’s analysis, and the point here, is to distinguish between two operating environments—shallow waters closer to China and deeper waters (especially in the Philippine Sea, but also some areas of the South China Sea within the first island chain) where better acoustics enhance American ASW and distance degrades China’s ability to employ land-based fighter jets to contest airspace. Ibid.
During a Sino-American crisis, the prospect of Chinese submarines breaking out to deeper waters will present both sides with potentially destabilizing incentives to consider initiating the use of force.

American ASW in the larger, less noisy operating environment where the US also enjoys air superiority, will be much more effective against China’s attack submarines. Nevertheless, the US would still face a challenge. More effective ASW can reduce, but cannot eliminate, the vulnerability of US naval assets that come in range of Chinese submarines. During a crisis, therefore, the US will have an incentive to eliminate as many submarines as possible when they are attempting to leave their littoral bastions, and to take out China’s land and space-based C4ISR assets that provide the necessary cueing information for successful strikes against American surface forces. If the US does not take such action or if, despite American ASW operations, some attack submarines nevertheless manage to survive the breakout, surviving Chinese submarines will face familiar “use’em or lose’em” pressures that encourage early escalation to the use of force. Deprived of the cover of coastal bastions, China’s submarines become much more vulnerable, jeopardizing their ability to pose the threat to inflict damage on American naval forces, the coercive leverage that China seeks to achieve through their risky deep-water deployment.

With respect to SSBNs, the risks for instability are different, but still significant. The US would also have an improved ability to track and target these Chinese subs once they enter deeper waters. It is less clear, however, that the US would be willing to initiate an attack on what is clearly an element of China’s strategic nuclear forces unless it were part of a broader

56 Ibid., p. 9.
57 Specifically, the US would be tempted to “physically or electronically attack the sources of such cueing, whether they be OTH-B radars today, or MTI radar satellites in the future.” Ibid., p. 12, 16-17.
58 Ibid.
American plan for a disarming first strike that also sought to eliminate China’s larger land-based missile force. Especially because an attack on strategic forces is one of the scenarios that China has set forth as justifying abandonment of its no-first-use policy, the US could not target China’s SSBNs simply to signal resolve in a crisis, confident that this would not result in nuclear escalation. That means the US would probably have to tolerate the increased credibility of China’s retaliatory capability that dispersed SLBMs would provide. Recognizing this, China would have incentives to deploy its SSBNs to distant, deeper waters early in a crisis. Deep water deployment would, however, introduce two new elements of risk.

One risk is the (presumably small) possibility that the US might not recognize a vessel as an SSBN and use force against what it thinks is an attack submarine intending a serious but still presumably safe signal of resolve during an intensifying crisis, but inadvertently escalating to a strike against China’s strategic nuclear forces. The other, more plausible, danger is the possible failure of China’s command and control over its SSBNs. The balance between negative control to prevent unauthorized use, and positive control to ensure that one’s threats can be carried out, is notoriously delicate for SSBNs that limit their communications to avoid detection. The challenge is most daunting during a crisis and becomes still more formidable if either side begins using military force, or if uncertainty about the durability of communications requires delegating decisions to submarine commanders who have limited information about how a


60 In general, the escalation risk would depend most importantly on the management of US “trailing and surveillance operations in support of strategic anti-submarine warfare (ASW) against those assets [SSBNs]. Depending upon the aggressiveness of the strategic ASW operations and PLAN countermeasures, such a situation has the potential to dramatically and unexpectedly escalate the crisis.” (Chase, Erickson, and Yeaw, “Chinese Theater and Strategic Missile Force Modernization and Its Implications for the United States,” p. 101). For a comparable concern about the dangers inherent in the comingling of ASW with strategic nuclear and conventional submarines during the cold war, see Barry R. Posen. Inadvertent Escalation: Conventional War and Nuclear Risks, Cornell Studies in Security Affairs. Ithaca, N.Y.: Cornell University Press, 1991.
confrontation is evolving and which of their standing orders they should execute. These
problems pose challenges even for the US which has more than half a century experience of
working on solutions. China’s search for solutions to command and control dilemmas that are
exacerbated by the small size and greater vulnerability of its SSBN fleet, is in its early stages.61

This potential for instability early in a crisis that reflects maritime geography is further
increased by the limited routes through which Chinese submarines must exit if they are to reach
deeper waters. The predictability and narrowness of these paths means that at the outset of a
crisis, the US would face a crucial choice should the Chinese decide to move out of the littoral
seas. The US could accept the risk of escalation from using its military when it has the best
chance to prevent China’s breakout.62 Or it could accept the elevated risk to US naval forces
that would follow from eschewing such interdiction. The Chinese would also face tough
choices early on. They could risk the loss of submarines by running the gauntlet, hoping the US
would not escalate by attempting to interdict. Or they could keep the submarines in their
relatively safe coastal bastion, but only by sacrificing much of their coercive value, as explained
above. Beijing’s decision on this matter would almost certainly be read as an early signal of its
resolve in the crisis. Although the effect of this signal on crisis stability is uncertain, the
possibilities for misinterpretations that lead to instability are striking.

If Chinese forces did not attempt the risky step of passing through maritime choke points,
the US would be likely to view this as sign that China’s leaders preferred to minimize risks in the

61 On concerns about the feasibility of maintaining centralized control over China’s strategic forces once they are
alerted, see Chase, Erickson, and Yeaw, “Chinese Theater and Strategic Missile Force Modernization and Its
Implications for the United States,” pp. 104-105; Andrew S. Erickson and Michael S. Case, “Information
Technology and China’s Naval Modernization,” *JFQ: Joint Force Quarterly*, no. 50 (Summer 2008), pp. 24-
30. See also Stephen Polk, “China’s Nuclear Command and Control,” in Lyle J. Goldstein and Andrew S. Erickson,
62 Cote, “Assessing the Undersea Balance between the U.S. and China,” pp. 9, 12, 18. Cote also notes that this
geographic constraint will not be eliminated even as China shifts to quieter, even the quietest nuclear submarines:
“truly quiet nuclear submarines would still be vulnerable to detection while exiting and entering their bases, and
while transiting between the first and second operating areas.” Ibid., pp. 9-10, 26, 27.
crisis, seemingly reducing the danger of instability. But if that interpretation led the US to press harder in crisis bargaining, Beijing might conclude that ensuring China’s interests required accepting the risk of attrition that would accompany an attempted breakout. In such circumstances, then, it might actually be less destabilizing for China to clearly signal its willingness to escalate by undertaking early maneuvers that the US would be more likely to read as preparation for an attempted breakout. This might convince the US negotiate a compromise with its unmistakably resolute adversary. And yet, if China’s leaders doubted such signaling would produce a negotiated settlement, and believed that they would ultimately have to actually attempt a breakout, they would want to minimize attrition by achieving tactical surprise. Since this requires avoiding actions that would alert the Americans, however, the US would be more likely to read China’s apparent inaction as signaling a lack of resolve. Nor could Beijing preclude such a misinterpretation by sternly reiterating its position. Hearing words but not seeing action, the US would be inclined to discount the warnings as cheap talk. If so, this could reinforce the conviction of China’s leaders that they had to send a clearer message through actions, escalating the crisis in ways the Americans did not anticipate.

Such a disturbing sequence of events, though obviously not inevitable, would not be unprecedented. It would in fact be similar to what happened prior to China’s entry in the Korean War, an instance of failed signaling and escalation initially described in the seminal work of Allen Whiting and recently reexamined by Branislav Slantchev. In the fall of 1950, as China

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63 On the importance of Chinese submarines covertly exiting the coastal waters, see Ibid., p. 11.
64 The incentive for China’s leaders to do this could increase if such “cheap talk” turned out to be costly, tying their hands by generating domestic political pressures that required them to shift their focus from maintaining crisis stability to maximizing the military effectiveness of their planned actions.
moved forces near the Korean border, the tactical need for secrecy to maximize military effectiveness if it intervened, prevented Beijing from pointing to its buildup as a credible signal of its resolve to respond if the American-led UN forces moved north of the 38th parallel and approached the Yalu River border with China. The competing Chinese goals of deterrence and military effectiveness if deterrence failed, contributed to Washington underestimating Beijing’s resolve that it instead tried, unsuccessfully, to communicate through indirect diplomatic channels. When US-led military operations pressed ahead, China’s leaders ultimately decided that they had to accept the costs of intervention to ensure their country’s vital interests near its northeastern border. The US had failed to grasp China’s determination, in part because tactical considerations made it difficult for Beijing to send a more credible signal of resolve.

In sum, if Sino-American crises occur, there are multiple reasons why they may be at least as dangerous as those that the US and the Soviet Union successfully navigated during the Cold War. I have also suggested why, over the next decade or more, such potentially dangerous Sino-American crises may be more likely than generally recognized. In the next section, I suggest that despite plenty of reasons to worry about such dangers, there are also reasons to believe that the degree of crisis instability, while real, will be limited. Both the dangers and their limits are a consequence of the combination of conventional and nuclear forces that would shape the incentives to resort to force during a Sino-American crisis.

III. Power Asymmetry, Targeting Information, and Crisis Stability

In this section, I present a more stylized discussion of stability in crises between two states where military power is sharply asymmetric as it is in the case of the US and China. My discussion looks at variation along only two dimensions—the type of military capabilities (nuclear or conventional) available to each side, and the adequacy of military intelligence. This
simplification helps illuminate two important influences on crisis stability, but at the price of omitting many other considerations that would be relevant in a real crisis (including some that are more easily depicted in the kinds of descriptions presented above). Although the US and China possess both nuclear and conventional weapons, to clarify how these different types of military forces together with variation in military intelligence affect crisis stability, it is helpful first to consider their effects separately.

Table 1 depicts variation in crisis stability between two adversaries, X and Y. In this asymmetric dyad, X’s military capabilities greatly exceed Y’s. The columns distinguish between three different settings—one in which leaders consider only the role of conventional forces, one where they consider the role of nuclear forces, and a third in which they consider conventional and nuclear forces together. The rows distinguish between settings in which the stronger side has good intelligence about the weaker adversary’s military forces it would target during a crisis if it opts to resort to the use of force, and those in which such information is lacking. During a crisis, stability is determined by each side’s decision whether to initiate the use of force. Both sides are assumed to be rational actors in the basic sense that they use force only when they expect it to advance their interests.

The decision about the use of force is shaped by X’s belief about the probability (P) of an effective military strike, and Y’s capabilities (C) which it can use against X. An effective military strike by X is defined as one which reduces Y’s ability to launch punishing retaliation to an acceptable level, or which improves X’s military advantage over Y such that its crisis

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66 Of course, any account chooses some subset of factors from the nearly limitless list of considerations that could be relevant to crisis stability— a list that would include not just details about the military forces each side deploys, but also the organizational framework for crisis decision-making, domestic political constraints (economic conditions, ideological, and other normative influences on foreign policy), and the role of leaders’ background and personality. The selectiveness reflected in this section is justified if it illuminates an important aspect of crisis stability— a complement to, rather than a substitute for, work that aims at a more exhaustive description.

67 This analysis does not examine the obviously important, but logically distinct, matter of which side prevails in the crisis, only the likelihood that the outcome will be preceded by the use of force.
bargaining position is strengthened. If X attacks, Y can agree to a negotiated settlement that X prefers (ending the crisis), bargain in an effort to reach a settlement more to its own liking (continuing the crisis), or use its remaining forces to ensure its interests (escalating the military conflict and risking war). If X has launched an effective strike, Y retains neither the capabilities it would need to credibly threaten the use of force in support of a tough negotiating posture, nor the capabilities it would need to actually use force to gain leverage over X. By contrast, if X’s use of force is ineffective, Y retains military capabilities \( D = [1-P] \times C \) that can be used to advance its interests by threatening or attacking X. As explained below, Y cannot initiate the use of force in order to enhance its bargaining position by improving its military strength, but only as a way to signal its resolve.

Table 1
Crisis Stability in Asymmetric Dyad X,Y
\( X >> Y \)

<table>
<thead>
<tr>
<th>X’s Information About Y’s Capabilities (military intelligence)</th>
<th>Conventional</th>
<th>Nuclear</th>
<th>Conventional + Nuclear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Unstable</td>
<td>Very Stable</td>
<td>Stable</td>
</tr>
<tr>
<td>Good</td>
<td>Very Unstable</td>
<td>Stable</td>
<td>Less Stable</td>
</tr>
</tbody>
</table>

\( P \) X’s expected probability of effective use of force

**Conventional Forces Only**

\( C_c \) Y’s conventional capabilities for a military response against X

\( D_c \) X’s expected cost of ineffective use of force

[damage from Y’s conventional retaliation or Y’s remaining conventional capabilities it can use in fighting X; \( D_c = (1-P) \times C_c \)]

**Nuclear Forces Only**

\( C_n \) Y’s nuclear capability to retaliate or compete with X in generating autonomous risk

\( D_n \) X’s expected cost of ineffective use of force

[damage from nuclear retaliation, or Y’s remaining nuclear capabilities it can use to generate risk of escalation; \( D_n = (1-P) \times C_n \)]

**Conventional and Nuclear Together**

\( C_{cn} \) Y’s conventional and nuclear capabilities that can be used to generate autonomous risk of escalation in crisis between nuclear armed states

\( D_{cn} \) X’s expected cost of ineffective use of force

[damage from Y’s military response or Y’s remaining capabilities it can use to generate risk of nuclear escalation, \( D_{cn} = (1-P) \times C_{cn} \)]
**Conventional Asymmetry and Instability**

Where only conventional forces are in play, as shown in the first column on the table, asymmetry generally contributes to the temptation to use force, and improved targeting intelligence exacerbates this source of instability.

In the upper left cell of the table, doubts about the adequacy of targeting intelligence reduce the stronger side’s confidence that overwhelming military superiority will permit it to use force effectively. This uncertainty tempers the expected benefits from attacking rather than continuing crisis bargaining. But, in contrast to an analogous confrontation between peer competitors, asymmetry in military capabilities enables the stronger side to compensate for shortcomings in its military intelligence (and everpresent concerns about the performance of weapons and personnel) by building redundancy into its attack plan. This possibility increases the attractiveness of the option to use force during a crisis. Either the military strike will so significantly reduce the weaker side’s capabilities that it simply settles the crisis on terms the stronger side prefers, or it will fight before settling, but with lesser capabilities that have been further degraded by the initial strike.

The weaker side may also be tempted to initiate the use of force, though for a different reason. It may anticipate that it will only be able to use its military forces if they are employed before they are destroyed. This familiar “use’em or lose’em” dilemma does not create instability because the weaker side believes it can prevail militarily by striking first (a situation that can arise in a crisis between peer competitors with good targeting intelligence). Instead instability can arise if the weaker side believes that initiating the use of force will improve its bargaining position by more clearly signaling its resolve to the stronger adversary.\(^{68}\) Such action may be

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\(^{68}\) On the use of force to signal resolve, even if it does not shift the military balance in one’s favor, see Jervis. *The Illogic of American Nuclear Strategy*, p. 129. See also Snyder and Diesing. *Conflict among Nations*, pp. 456-457.
especially likely if the weaker side believes not just that it has vital interests at stake in the crisis, but that it values them more than its stronger adversary values its interests. If the stronger side is aware of the weaker side’s belief, but actually values its own stakes more than its outgunned rival thinks, this will increase the temptation for the stronger side to initiate the resort to force. Preemption would greatly reduce or even forestall suffering the damage that would result from absorbing the first blow, however ineffectual, from its weaker adversary.

The lower left cell of the table depicts circumstances in which the pressures to initiate the use of force are even higher and crisis instability therefore greater. The stronger side no longer needs to rely on redundancy to compensate for shortcomings in targeting information. Confidence in its intelligence about the outgunned rival increases the expectation that the use of military force will be effective, which in turn increase the use’em or lose’em pressures on the weaker side. Such a crisis situation, then, is at the unstable end of the spectrum in which the incentives to preempt for both sides may be nearly irresistible and bargaining is most likely to give way to the use of force.

If only conventional forces were in play, a crisis between the US and China in the near future would occur under conditions of asymmetry like those represented in the first column on the table. Moreover, the combination of sophisticated US intelligence capabilities and what is generally regarded as a desirable push for China to be more transparent about its military posture, increases the risk that a Sino-American crisis would approximate the dangerously unstable conditions depicted in the lower cell.

In the sort of maritime scenarios described above, the US would face temptations to initiate the use of force early in part because the adequacy of excellent peacetime intelligence that provides targeting information would degrade as China began dispersing its naval forces to
deeper waters and shifted to more decentralized command and control arrangements. China’s leaders would also face temptations to use force, though for a different reason. They would likely believe that their interests at stake were higher than those for the US, precisely the belief that provides an incentive for a clearly outgunned rival to initiate the use of force to signal resolve before its capabilities and options can be further diminished.

Beijing would, in its view, be defending China’s sovereign territorial and maritime interests in nearby seas. While such crises would also engage American interests, these would differ in two respects. First, Washington would be seeking to preserve a regional interest in upholding its reputation as a resolute ally who cannot be intimidated even by a determined and increasingly potent (if still relatively weak) Chinese military should it attempt to threaten the use of force to alter the status quo, as well as a global interest in upholding the principle of freedom of navigation on the high seas. While not inherently less important than China’s concerns, the US stake reflects extrinsic interests in reputation and principle, while China’s stake reflects intrinsic interests in the territory and waters themselves. Second, because the theaters in which these crises would play out are much closer to China than the US, geography makes it likely that Beijing could more readily claim that its stakes touch on interests that were vital. A comparably credible American claim would depend on the persuasiveness of Washington’s explanation about the nature and importance of its interests.69 These fundamental distinctions suggest why Beijing could believe, even if incorrectly, that it values its stakes in the dispute more than Washington does-- a belief that would increase the temptation during a crisis for the weaker Chinese side to

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69 This distinction is similar to, if less clear than, the distinction that Schelling drew between the credibility of threats to accept risks to ensure the security of one’s homeland as opposed to everything outside one’s homeland. (Schelling. *Arms and Influence*, 1966, pp. 35-36.) Snyder and Diesing also suggest difficulties in comparing resolve between actors in a crisis when their interests at stake are not self-evident, objectively measured things, but rather reputations. See Snyder and Diesing. *Conflict among Nations*, pp. 456-457.
resort to force while it still has forces it can use. It could expect that a demonstration of its willingness to run risks over the stakes it treasures so dearly would convince Washington to cut a deal rather than escalate to a more serious military conflict the US could clearly win, but only by accepting the costs of fighting over stakes that Beijing believes it values less. However, if Beijing were incorrect in its assessment of the American understanding of its own stakes, the US would be tempted to preempt China’s use of force by tapping its superior military capabilities and targeting intelligence whose reliability would be at its peak early in the crisis.

**Nuclear Asymmetry and Stability**

The prospects for stability in a Sino-American crisis look bleak when only conventional forces are considered. In reality, of course, both countries also possess nuclear weapons. How would they affect crisis stability? I isolate the effects of nuclear weapons on crisis stability partly because of the possibility that, in a serious crisis, the US and China would focus narrowly on nuclear considerations. But, even if that is not likely, it is helpful for teasing out the distinctive pressures on crisis stability these weapons introduce.

Again, stability is determined by each side’s decision whether to continue bargaining or to use force against the adversary. As in the conventional case, this decision is shaped by beliefs about the probability (P) that initiating the use of force would be effective, and the capabilities (C) its adversary could use in response. But where the relevant forces are nuclear, the substantive meaning of effectiveness is somewhat different. The use of force can be effective in one of two ways. One is if it reduces the adversary’s ability to inflict retaliatory punishment to

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70 In a US-China crisis, the stakes could also be shaped by the way the crisis begins, especially if it is a dispute over Taiwan. A crisis triggered by initiatives that China perceived as an open challenge to the status quo by Taiwan with US support, would increase domestic political pressures in China dramatically raising the stakes for Beijing. A crisis that began with an unprovoked challenge to the status quo by China, would dramatically raise the stakes for Washington by engaging US concerns about the credibility of its international commitments in East Asia. Absent such stark framing effects, Christensen suggests that China’s leaders may believe that when it comes to the future of Taiwan, the balance of interests underpinning resolve favors them. See “The Meaning of the Nuclear Evolution,” pp. 38-39.
levels that are deemed acceptable. Given the catastrophic damage that even modest nuclear capabilities can impose, however, this essentially requires that the use of force somehow preclude, rather than merely diminish, the retaliatory blow that even a weaker rival’s relatively small nuclear arsenal can deliver. A second way in which force can be effective is if it increases the attacker’s bargaining advantage during the crisis in a sense that is distinctive to a nuclear confrontation.

Between nuclear armed adversaries, bargaining is driven by the ability of each side to credibly threaten escalation that the adversary finds intolerable. When adversaries can both inflict catastrophic punishment on each other, neither can credibly threaten to intentionally launch an attack that invites the certain disaster of a full nuclear exchange. Instead, in what Schelling termed a “competition in risk taking,” gaining an advantage depends on the ability to generate a level of shared risk of catastrophe that the adversary cannot tolerate. To be effective in the second sense, then, the resort to nuclear force during a crisis must meaningfully reduce the adversary’s ability to compete in any subsequent risk-taking.

Even with great confidence in one’s military intelligence, it is very difficult to design the use of nuclear forces that meets either test of effectiveness. To fully disarm even an outgunned rival, the use of force has to be so large that anything short of perfection requires accepting the near certainty that the adversary would launch a full retaliatory strike with its surviving forces; when these weapons are nuclear, not many need survive to make this prospect unacceptable [Dn

The alternative is to initiate a more limited nuclear strike designed only to neutralize the adversary’s command and control necessary for launching its nuclear forces, or only to degrade the adversary’s nuclear arsenal such that it lacks the means to compete in risk-taking. But these options faces practical challenges that are not much less daunting. If the strike is carefully limited to be so small that it is sure to avoid triggering a full retaliatory response, it is unclear that it will suffice to strip the adversary of its ability to compete in nuclear risk-taking. If the strike is large enough to do so, it increases the danger of triggering catastrophic retaliation—since it will be harder for the adversary to distinguish such a large attack from one that is an unrestrained strike.

Moreover, during a crisis the challenge of designing an effective attack in either sense increases. Where nuclear-armed rivals are already locked in a crisis, the attack would not be a surprising “bolt out of the blue,” but rather would take place when the dark clouds of war had already gathered. As such, the attacker would have to assume that its adversary is more vigilant and readier to respond than when its military is on normal, day-to-day alert. The adversary will almost certainly have put its arsenal on a higher level of readiness and perhaps redeployed it in ways that undermine confidence in targeting information based on peacetime intelligence (even if efforts were made to update it). Heightened alert would also reduce the plausibility of the most enticing attack option—one that incorporates decapitation of the adversary’s national command in order to render any surviving nuclear forces unusable. Because the logic of such targeting is so clear, the stronger side would have to assume that the adversary will have taken steps to reduce this obvious vulnerability. Aside from attempting to actually protect the national leadership (e.g., through sheltering or missile defenses), its vulnerability can be lessened by establishing redundant chains of command, by preparing for prompt delegation of decision-
making authority once an attack is detected (perhaps even pre-delegating launch authority prior to attack), or by dispersing the national command and making it mobile.  

The challenges of using nuclear force effectively mean that although crisis stability is not guaranteed (P >0), in an asymmetric nuclear dyad, it is very robust. Unlike the conventional case, despite impressively dominant capabilities the stronger side cannot exploit redundancy to compensate for a lack of adequate targeting information (in the upper cell). And even with better targeting information (the lower cell), it is difficult to increase the probability that the use of nuclear forces would be effective enough to offset the costs the weaker adversary could impose if the attack were ineffective. The stakes in a crisis would have to be implausibly high to clearly match or exceed this expected cost. Because the temptation for the stronger side to use force is so greatly muted, the pressures that drive the weaker side’s use’em or lose’em logic when the adversaries are conventionally armed, are less relevant when they are nuclear armed.

But what if a crisis intensified and war between nuclear armed states seemed not just possible, but likely? Would the temptation to strike before being struck—a recipe for instability in the conventional case—become irresistible? How would asymmetry affect this temptation? After all, despite their many disagreements about nuclear strategy and policy during the Cold War, analysts generally agreed that the only thing worse than being struck second was being struck first. 

If war were inevitable, it was argued, even a small chance that a first strike could cripple the adversary or tilt the balance of damage in one’s favor could make this a rational choice. The relevance of this claim, however, requires what is arguably a theoretically useful,

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73 See Powell, *Nuclear Deterrence Theory*; Betts, *Nuclear Blackmail and Nuclear Balance*. 
but misleadingly unrealistic, assumption about the perceived inevitability of war during a crisis.\textsuperscript{74} The presence of nuclear weapons alters the plausibility of this assumption. Before the advent of nuclear weapons, war was seen as a viable if usually undesirable alternative to diplomacy. There is little to suggest that nuclear armed adversaries have ever viewed the prospect of war in quite the same light. On the contrary, contingency plans and hypothetical scenarios notwithstanding, the limited history of crises in which the focus was on nuclear weapons suggests that leaders have stubbornly resisted viewing nuclear war as imminent, let alone inevitable.\textsuperscript{75}

In the most serious crisis between the Cold War superpowers, the confrontation over Cuba in 1962, the balance of nuclear capabilities was asymmetric, the stakes were high, the rivalry intense, and both the Americans and Soviets knew that the US had a doctrine, targeting plans, and the intelligence to facilitate a very effective preemptive strike against Soviet forces.\textsuperscript{76}

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\textsuperscript{76} President Kennedy does not seemed to have accepted the idea that America’s decisive nuclear edge conferred a big strategic advantage. During the Berlin crisis, he eschewed the nuclear options he considered. And his initial comment on the military significance of the increased nuclear capabilities targeting the US that the Soviets would have by putting weapons in Cuba in October 1962, recorded on the White House tapes, was “What difference does
Yet neither side acted as though it believed war was inevitable. Instead, when war seemed imminent, both sides focused on crisis bargaining and resisted the military option.77

What does this suggest about the prospects for nuclear stability in a US-China crisis? The US commands a nuclear arsenal that is far larger, more diverse, and more sophisticated than China’s. In addition, US military intelligence about China’s arsenal today rests on much more reliable technical means than were available during most of the Cold War. Consequently, the US likely has better information about the smaller nuclear target set it faces in contemporary China than it had about the larger target set the Soviet nuclear arsenal represented. If the weapons in play were only conventional, as noted above, the American advantage in terms of capabilities and military intelligence would make the use of force during a crisis very tempting, something that would also increase the incentives for China to resort to force first. But where the forces are nuclear weapons, the situation is quite different.

During a crisis, asymmetry alone clarifies the incentives for the Chinese to augment the costs of an ineffective use force by the US. The availability of nuclear weapons makes this possible in ways suggested above (enhancing the readiness to respond and complicating the targeting challenge by redeploying nuclear forces and perhaps fostering doubts about their actual

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77 Despite the US advantage, the logic of nuclear preemption did not drive military preparations on either side. As the Cuban crisis intensified, the American plan to resort to force (if diplomacy failed to resolve the crisis) did not entail a comprehensive counterforce first strike against Soviet nuclear forces. Nor did Moscow ready its nuclear forces in ways that might have enabled it to use them before they could be destroyed by the Americans. The Kremlin was apparently more concerned about triggering a US decision for war that could still be avoided. See Trachtenberg, “The Influence of Nuclear Weapons in the Cuban Missile Crisis”; Powell, “Crisis Stability in the Nuclear Age,” p. 72. However, focused mainly on the danger of thermonuclear war, during the crisis Kennedy and Khrushchev may have underestimated other risks—especially the risk of escalation being generated by nonnuclear forces formally under their command, but in practice beyond their complete control. Some of the more eye-opening, potentially destabilizing military actions during the Cuban missile crisis that moved ahead on the ground without close coordination from Moscow and Washington are described in Michael Dobbs. One Minute to Midnight: Kennedy, Khrushchev, and Castro on the Brink of Nuclear War. 1st ed. New York: Alfred A. Knopf, 2008.
number and disposition by dispersing them to alternate locations, frequently relocating mobile
delivery systems, and issuing claims about previously undisclosed forces) that are not feasible
when only conventional weapons are in play. As a result, even if the US objective were only to
greatly reduce rather than eliminate China’s nuclear options, an American strike designed to
compensate for uncertainty about the target set would need to be very large. In addition, other
steps the Chinese could be expected to take during a crisis-- such as raising alert levels or
predelegating launch authority as a hedge against decapitation-- would increase the risk for the
US that detection of a sufficiently large attack could lead to a full retaliatory response before
China’s forces were destroyed. Retaliation could result from a loss of control over vulnerable
forces put on higher alert to improve their survivability, or be ordered by Beijing if it
misperceived that it was absorbing an unrestrained nuclear attack, the one situation in which
rationality would no longer bar the weaker side from launching its nuclear weapons.\(^{78}\)

In contrast with the purely conventional crisis, where only nuclear weapons are in play
preemptive pressures would be unlikely to lead the US to resort to force. Nor would China be
likely to initiate the use of force. As in the conventional case, China could not gain a military
advantage. But in addition, unlike the conventional case, a decision to use nuclear forces to
signal resolve would require Beijing to accept a qualitatively greater risk of catastrophic
escalation. While initiating the use of nuclear force might effectively remove any doubt in
Washington that it was facing a resolute Chinese adversary, asymmetry would endure and the
US could still draw on its larger arsenal to more effectively manipulate the risk of escalation that
would ultimately determine bargaining advantage after the attack.

As noted above, the only circumstance under which it would clearly be rational for
Beijing to order the use of its nuclear forces during a crisis would be if China’s leaders believed

\(^{78}\) See Goldstein, *Deterrence and Security in the 21\(^{st}\) Century*, ch. 2.
that the US had already launched an unlimited nuclear strike.\textsuperscript{79} Since this circumstance requires
the US to resort to force first, however, that is equivalent to saying that the real threat to crisis
stability would come from the US not China. But as also noted above, the risk that the US would
generate by initiating a nuclear strike, including the most plausible limited strike that aims to
avoid triggering a full Chinese response, reduces its attractiveness. The stakes for the US would
have to be extraordinarily high to justify the danger represented by the expected cost incurred if
its use of force proved ineffective \[D_n = (1-P) \times C_n\]. Moreover, in this unlikely scenario, the US
would have to be so confident in the quality of its intelligence that it could resist the temptation
to enlarge the attack to minimize the risks of ineffectiveness (which could result not only from
misplaced confidence in intelligence about the target set in China, but also from shortcomings in
the performance of American weapons and personnel). And the temptation to enlarge the scope
of the attack would be strong. Resisting the impulse would require leaders in the US to believe
that their intelligence enabled them to correctly anticipate all the steps, already described, that
China would take during a crisis to reduce the effectiveness of an American attack. The only
hedge against concerns about unreliable performance would be the redundancy provided by an
enlarged strike.

Thus, the US would face a dilemma. If it chose to initiate a carefully limited use of
nuclear force, it might be able to resolve the crisis in its favor, but only if all went according to
plan. If it chose to enlarge the scope of its attack as a hedge against the risks of ineffectiveness,
it would increase the danger of triggering unrestrained nuclear retaliation from an alert Chinese
adversary who might mistake the enlarged attack for a full assault. The latter concern would be
serious, since a more accurate assessment would ultimately depend on the ability of a militarily

\textsuperscript{79} Given the vulnerability of its arsenal, China would have incentives to retaliate by launching on warning of the incoming American attack or while it was underway.
overmatched Beijing, in the midst of absorbing a nuclear strike, reaching a quick decision under enormous stress while realizing that it might have no time for second thoughts. Because it is hard to imagine a real world political leader, American or otherwise, actually deciding to initiate a nuclear attack without also trying to ensure that it achieves its purpose, the enlarged strike would seem to be the more prudent choice. Yet the more prudent choice has an expected cost, a small probability of unrestrained nuclear retaliation, likely to dissuade a leader from embracing it. This dilemma, then, reflecting the challenges of devising an effective option for the use of force when the adversaries are nuclear armed, even if one enjoys vast superiority and excellent information about the adversary’s capabilities that must be struck, indicates why, compared with conventional cases, stability in purely nuclear crises is so much more likely to endure. Short of an implausible belief that war is not just imminent but inevitable, neither side would be likely to choose to initiate the use of force.

The robustness of nuclear crisis stability, however, should not only be compared with the conventional case. The more relevant comparison is one in which the adversaries in a crisis have both nuclear and conventional forces. After all, every existing nuclear weapons state, including China and the US, has possessed conventional weapons as well. Although the considerations outlined in the purely conventional and nuclear crisis scenarios presented above remain relevant, their interaction has a distinctive effect on crisis stability.

Nuclear and Conventional Asymmetry and Crisis Stability

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The right column in Table 1 depicts variation in crisis stability between adversaries X and Y, when both have nuclear as well as conventional forces. Where both conventional and nuclear weapons are in play, an effective military strike need not meet the stiff test described in the purely nuclear case. When conventional forces are included, X can instead choose to use these typically more discriminating weapons to minimize the danger that an attack would trigger catastrophic nuclear retaliation. Nevertheless, an effective military strike would have to meet a stiffer test than the one described in the purely conventional case. In that case, the use of force is effective if it either disarms the adversary or shifts the balance of military capabilities such that the attacker’s initial military advantage is increased, even if the adversary does not immediately accede to its crisis demands. When the adversary has nuclear weapons, however, unless the use of conventional forces is certain to fully destroy the adversary’s ability to inflict horrific retaliatory punishment, an effective strike must strengthen the attacker’s bargaining position in the very specific sense that it reduces the adversary’s ability to engage in a competition in nuclear risk taking. But to gain such an advantage in the brinkmanship that could follow a conventional strike, the use of force must either strip the adversary of its ability to match the attacker in bids to manipulate risk, or it must expose the adversary’s lack of resolve to tolerate the level of risk its remaining mix of forces can generate, including the risk of escalation to a catastrophic nuclear exchange that neither side could rationally and deliberately choose to initiate.\footnote{One clear consequences of China’s military modernization has been an increase in the number and variety of military means to generate risk. Its increased conventional capabilities are thus strategically useful even though they do not yet greatly improve China’s odds for defeating the superior US forces it could confront. See also Christensen’s discussion of relevant passages China’s Science of Second Artillery Campaigns in “The Meaning of the Nuclear Evolution,” esp. pp. 35-36.} Although a conventional strike need not fully deprive the adversary of its ability to manipulate the risk of nuclear escalation, to be effective it must leave the attacker with options that trump those available to its weaker rival. The greater the ability to use force in a way that
meets this test of effectiveness, the greater the degree of crisis instability between adversaries armed with nuclear and conventional weapons.  

The standard of effectiveness for the use of force against the conventional capabilities of a nuclear armed state is very high. Shortcomings in targeting intelligence make it unlikely that even a richly redundant attack relying only on conventional weapons would eliminate the weaker state’s ability to tap its surviving forces to manipulate the risk of nuclear escalation. And for reasons outlined above, relying on nuclear forces to offset concerns about the adequacy of one’s targeting intelligence is not likely to be very attractive. Better intelligence increases confidence in the probability that the use of conventional force can be effective. But when the adversary also possesses nuclear arms, it is not sufficient to merely reduce adversary’s ability to prevail in conventional fighting that might follow this initial use of force. The attack must deprive the adversary of even the more meager conventional and nuclear capabilities necessary for generating and manipulating the risk of nuclear escalation. To tweak Schelling’s apt language, for this purpose the adversary does not need to retain a “war winning force” but only a “war threatening force.” 

Because this is the expected cost of an ineffective use of force, the temptation to attack is lower than in the conventional case, though not as obviously low as in the purely nuclear case.

If its interests at stake in the crisis are sufficiently high, however, the more powerful state might be willing to accept the risk that its use of conventional force would be ineffective and result in a shift from crisis diplomacy to nuclear brinkmanship. Especially if leaders in the

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82 Although the temptation to use force may be higher when it promises a bargaining advantage, the decision to attack also depends on the value of the stakes in the crisis. If even a diminished expected cost of using force exceeds the value of prevailing in the crisis, then, a lower risk of failure may suffice to discourage an attack. In short, increases in the attractiveness of using force by definition reduce crisis stability (my selective focus in the comparisons presented here), but that alone does not make the use of force inevitable.

83 See Schelling, *Arms and Influence*, esp. chap. 3.
stronger state believed they were prepared to run a higher risk of uncontrollable escalation than their weaker adversary, they might be willing to gamble and lose their bet that a conventional strike would be effective. Under such circumstances, they might see the use of force as a way both to reduce the adversary’s capabilities and to demonstrate their determination to prevail. Similarly, if the weaker side believed its stakes in the crisis were greater and that it was prepared to run the higher risk of escalation, it could decide to use its nonnuclear forces to signal resolve, as in the purely conventional case. But because its lesser capabilities would not enable it to deprive its much stronger adversary of the conventional forces it could use to manipulate the risk of nuclear escalation, the benefits for initiating such a limited use of force during a crisis would not be as straightforward.

The temptation to resort to force would increase if leaders on either side believed that war were imminent. Under such circumstances, the relevant consideration shifts to the benefits of striking before being struck. If the side striking first were expected to gain an advantage in the conventional forces it could tap to generate and manipulate the risk of nuclear escalation, preemptive pressures would be strong. The strength of these pressures would depend on the extent to which an attack has a meaningful effect on the forces that would remain available to each in the nuclear brinkmanship that could follow. However, because the principal purpose of surviving conventional forces would not be fighting and winning battles, but instead confronting the adversary with the risk of nuclear escalation, it would be more difficult for the use of force to have such a meaningful effect.

In sum, even if the balance of capabilities is sharply asymmetric and the strong side has good targeting intelligence, nuclear weapons enhance crisis stability because they alter the strategic role of conventional forces in ways that make the effective use of force more difficult
than in the purely conventional case. Nevertheless, the danger of crisis instability is higher than in the purely nuclear case. It is at least plausible that the stronger side could believe it had the capabilities and intelligence to deprive its outgunned adversary of the conventional means to compete in risk taking, and that its conventional strike would safely avoid triggering unrestrained nuclear retaliation. Moreover, its military superiority means even an ineffective strike using conventional weapons would not significantly diminish the stronger side’s ability to rely on its larger array of conventional capabilities to press its weaker rival, either in conventional fighting or in manipulating the risk of nuclear escalation. Because the expected cost of an ineffective use of force is reduced, crisis stability is weakened. But because that reduced cost is the chance that the weaker adversary may not agree to settle the crisis and instead respond by accepting the challenge of nuclear brinkmanship, stability is greater than where only conventional forces are in play. Where nuclear weapons are present, the stronger state must value its stake in such a crisis enough that it is prepared to accept the elevated risk of nuclear brinkmanship that even a technically successful conventional attack generates.\footnote{On the transformative effect of nuclear weapons on the comparison between “the value of the interests in conflict and the possible costs of war” see Snyder and Diesing, \textit{Conflict among Nations}, pp. 450-451.}

If it is plausible that force could be used, is it possible that both sides would face incentives to act preemptively during an intensifying crisis, as in the purely conventional case? In the mixed conventional-nuclear case, the purpose of preemption would be a bit different. The weaker side would have an incentive to use its conventional forces to manipulate the risk of nuclear escalation for leverage before its powerful adversary’s military strike could either eliminate or reduce its array of options for competing in risk-taking after the attack. The stronger side would have an incentive to strike first to eliminate its adversary’s conventional forces that could be used for this purpose. The stronger side also would have an incentive to
initiate the use of force because it recognizes the weaker adversary’s incentive to act first and would want to preclude this through a preemptive strike. This sounds quite similar to the classic recipe for crisis instability described in the purely conventional case, one where the reciprocal fear of surprise attack makes the use of force nearly inevitable. More to the point, it seems to identify the incentives that would face American and Chinese decision makers contemplating the use of their naval forces during a crisis in the Western Pacific as described in preceding sections. Instability is tempered, however, by the strategic role any use of conventional force plays in a crisis between states with nuclear weapons-- manipulating the risk that refusing to settle the crisis courts a catastrophe resulting from escalation that escapes the rivals’ control. Either side’s use of conventional military forces increases this risk. As a result, the inescapable danger of prompt catastrophe exerts a dissuasive effect on both sides that is absent in purely conventional dyads.

At present, and for at least the next decade, the US advantage in terms of the number and accuracy of its conventional weapons together with its technically superior and more redundant sources for targeting intelligence increase the feasibility of using force in a crisis with China. The higher the value the US places on its interests at stake in such a crisis, and the more imminent war seems, the greater would be the temptation. The shadow of nuclear escalation would likely inhibit the US from using force in ways that would run a serious risk that China’s leaders mistake the scale of the attack and perhaps respond by escalating promptly and dramatically. Wary of such escalation during a crisis, the US might be dissuaded from using even conventional weapons against militarily valuable targets on the mainland, such as missile bases and radar installations essential for China’s ASBM when it becomes operational. Other American uses of conventional force, including the ASW and ASAT operations discussed above,
might, however, seem less risky. They probably would be less risky. But they would not be risk free and crisis stability would not be fully assured. If the US believed its interests at stake in the crisis were high enough, it could decide that the risk was worth running. If China believed its stakes were high enough, it, too, could decide to accept the dangers it would face in manipulating the risk of escalation by using whatever forces it retained after such an American military strike. In such circumstances, even if no stake would be high enough for either the US or China deliberately to choose an unrestrained nuclear exchange, some stakes might be high enough to choose the use of conventional force that elevates the risk of escalation to an unrestrained nuclear exchange.\textsuperscript{85}

The stakes would have to be extraordinarily high for either party to accept that risk and gamble that the use of conventional force would advance its interests in resolving the crisis rather than set in motion events that lead to a mutually catastrophic outcome. As discussed above, however, both China and the US do place a very high value on the interests over which they could find themselves locked in a war-threatening crisis in the Western Pacific. Whether that value is high enough to contribute to crisis instability is an empirical question that cannot be answered in advance. When one side has clearly superior capabilities and confidence in its targeting information, the likelihood of a scenario in which crisis bargaining gives way to the use of conventional force with unpredictable consequences increases, even in the shadow of nuclear weapons. This suggests grounds for concern about stability in a crisis between the US and China while China remains so much weaker and US reconnaissance capabilities are so impressive. The two countries’ deadly nuclear capabilities, despite asymmetry, provide powerful incentives for restraint on both sides. Asymmetry in their conventional capabilities, however, means that during a crisis resulting from a dispute over an issue in which the interests at stake are

\textsuperscript{85} See Schelling, \textit{Arms and Influence}, chap. 3.
extraordinarily high, leaders could be tempted to initiate the use conventional force as a way to
gain leverage, even if doing so necessarily generates an unknown risk of nuclear catastrophe that
both will have incentives to manipulate.

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I have suggested reasons why US-China crises while China remains militarily outclassed
by the US, may be more likely than generally recognized, and perhaps more dangerous than
those the US and the Soviet Union faced during the Cold War. Also worrisome is the possibility
that the US and China might not appreciate the other side’s views about the importance of the
interests it would have at stake in such a crisis. Especially if one side believes its stronger
interests ensure it is the more resolute, it could be tempted to signal resolve through the limited
use of conventional force to manipulate risk. Since the risk being manipulated is ultimately the
genuine risk of escalation to a nuclear exchange, this should be sufficient incentive to encourage
further scholarly attention to the prospects for dangerous instability in US-China crises during
the current period. Other, widely debated, concerns raised by China’s possible arrival as a true
peer competitor facing the US have already received much attention. While clearly important,
such analysis has focused on matters that are both more distant and more uncertain than the
immediate danger of crisis instability. The good news is that whatever other challenges China as
a peer competitor could one day pose, the end of China’s profound military weakness would
mark the end of the particular problem identified here—the potential for crisis instability
resulting from the asymmetry in Sino-American military power. The bad news is that before
such a dramatic shift in relative power occurs, there is a real, if limited, possibility that a
mismanaged Sino-American crisis could render speculation about these long term implications a
tragically moot point.