Nuclear Weapons in Asia: Perils and Prospects

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The spread of nuclear weapons in Asia threatens nuclear deterrence and crisis stability in the region and offers unique challenges to United States and allied security. The article contrasts two possible futures for nuclear Asia: a relatively more constrained proliferation regime with tiered levels of agreed deployment ceilings among states; and an unconstrained nuclear arms race in Asia. Not only regional tensions, but also the overlap between regional and global antagonisms and ambitions might upset nuclear deterrence stability in Asia.

Keywords: Deterrence, nonproliferation, missile defense, coercion, China, Russia, Japan, Iran, Pakistan, India, North Korea, South Korea, United States

The Obama administration has refocused its military-strategic priorities towards Asia, as well as portions of the Middle East within geostrategic reach of Asia. This refocus in US strategic planning and deployment is not only driven by China's rise in economic and political influence, but also by the growing risk of regional nuclear arms races that could lead to increased political tensions, and in the worst scenario, the outbreak of a nuclear war. The spread of nuclear weapons in Asia not only raises the likelihood of wars between states with weapons of mass destruction, but also increases the likelihood of nuclear handoffs to terrorists or other non-state actors dissatisfied with the existing international order.¹ In addition, a nuclear conflict between two large states in Asia, such as India and Pakistan, has the potential to escalate into a wider regional war with potential global consequences.²

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As military planners project toward the third decade of the twenty-first century, the political context for current and future Asian nuclear arms competition is clearly different from the political context that surrounded US-Soviet Cold War rivalry. Therefore, disciplined conjecture about the likelihood of deterrence, crisis, and arms race stability in a future nuclear Asia is both timely and prudent.³ The present study considers pertinent policy challenges to nuclear strategic stability in Asia and analyzes some options for more or less stable configurations of Asian nuclear weapons states.

Nuclear Proliferation: Yes or No?

United States policy has supported the Nuclear Non-Proliferation Treaty (NPT), requiring non-nuclear state signatories to the treaty to abjure the option of nuclear weapons. Under the NPT regime, non-nuclear states have the right to develop a complete nuclear fuel cycle for peaceful purposes, for example, generating electricity. States adhering to the NPT are required to make their facilities and infrastructure available for scheduled or challenge inspections by the International Atomic Energy Agency (IAEA). The IAEA has a mixed track record: depending on the cooperation or resistance of the regime in question, inspectors have obtained accurate roadmaps of countries' nuclear programs or they have been misled. In Iraq, for example, regular IAEA inspections prior to 1991 failed to detect the complete size and character of Saddam Hussein's efforts to develop nuclear weapons.

US intelligence has also performed erratically in ascertaining the extent of WMD-related activity, including nuclear activity, in potential proliferators. The CIA assured President Bush and his advisors that the presence of large quantities of WMD in Iraq in 2003 was a foregone conclusion, but no WMD were found by inspectors after the completion of Operation Iraqi Freedom and the ousting of Hussein from power. The CIA was apparently taken by surprise in 1998 by India and Pakistan's nearly simultaneous detonations of nuclear weapons, followed by announcements in New Delhi and Islamabad that each was now an acknowledged nuclear power. In yet another instance, the US government signed an agreement with North Korea in 1994, freezing North Korea's nuclear development programs, but in 2002 North Korea unexpectedly denounced the agreement, admitted it had been cheating, and marched progressively into the ranks of nuclear weapon states.

The possibility of nuclear material or technology finding its way into the hands of terrorists is a concern that provides further incentive for containing the spread of nuclear weapons and delivery systems. Reportedly, al-Qaeda has tried to obtain weapons-grade material (enriched uranium and plutonium) and assistance in assembling both true nuclear weapons and radiological bombs (conventional explosives that scatter radioactive debris). Nuclear weapons are in a class of their own in terms of mass destruction – a miniature nuclear weapon exploded in an urban area has the potential to cause much more death and destruction than either biological or chemical weapons similarly located.

Joining the concern over terrorists obtaining nuclear weapons is disconcerting evidence of nuclear entrepreneurship resulting in proliferation. The A. Q. Khan network, which comprised Pakistani and other government officials, middlemen, and scientists, conducted international commerce for several decades in nuclear technology and know-how. Described as a "Walmart of nuclear proliferation," the Khan network apparently transferred nuclear material to North Korea, Libya, and Iran, among other states.⁴ States seeking a nuclear start-up can save enormous amounts of time and money by turning to experts in and out of government for help. Additionally, the knowledge of how to fabricate nuclear weapons is no longer as esoteric as it was in the early days of the atomic age.

In response to 9/11 and to the possible failure of nuclear containment in Asia and the Middle East, the George W. Bush administration sought to reinforce traditional nonproliferation with an interest in preemptive attack strategies and missile defenses. US superiority in long range precision weapons made preemption technically feasible, provided the appropriate targets had been identified. Bush policy guidance apparently also permitted the possible use of nuclear weapons in preemptive attack against hostile states close to acquiring their own nuclear arsenals.⁵ While missile defenses are further behind the technology power curve compared to deep-strike attack capability, the first US national missile defense (NMD) deployments took place in 2004, and the Obama administration has embarked on an ambitious program for European-deployed land and sea-based missile defenses called the European Phased Adaptive Approach (EPAA).⁶ Preemption strategies and defenses are controversial in their own right.⁷ For present purposes, however, they appear to be simply talismans of US government awareness and acknowledgment, as containment and deterrence can no longer complete the anti-proliferation tool kit.

A Multipolar Nuclear World

Uncertainty about the rate of nuclear weapons proliferation in Asia in the future is in contrast to the comparative stability of nuclear proliferation during the Cold War,⁸ when nuclear weapons spread from state to state at a slower rate than even pessimists projected. In part this was due to the bipolar character of the international system and the nuclear preeminence of the Soviet Union and the United States over other contenders. Both superpowers discouraged horizontal proliferation among other state actors, even as they engaged in vertical proliferation by creating larger and more technically advanced arsenals. In addition, the NPT and the regime it established contributed to limit the rate of the spread of nuclear weapons among states that might otherwise have gone nuclear.⁹

The end of the Cold War and the demise of the Soviet Union have moved the zone of political uncertainty – and the interest in WMD and missiles – eastward, across the Middle East, South Asia, and the Pacific basin.¹⁰ North America and Western Europe, pacified or at least debellicized by an expanded NATO and a downsized Russia, regard nuclear weapons as dated remnants of the age of mass destruction. The recent Revolution in Military Affairs has created a new hierarchy of powers, based on the application of knowledge and information to military art.¹¹ Nuclear and other WMD are, from the standpoint of the postmodern West, the military equivalent of museum pieces, although still dangerous in the wrong hands.

In contrast, major states in Asia and in the Middle East within the range of long range missiles based in Asia regard nuclear weapons and ballistic missiles as potential trump cards. The appeal of nuclear weapons and delivery systems for these states is at least threefold. First, they enable "denial of access" strategies for foreign powers who might want to interfere in regional issues. US military success in Afghanistan in 2001 and in Iraq in 2003 only reinforced this rationale of access denial via WMD for aspiring regional hegemons or nervous dictators. Second, nuclear weapons might permit states to coerce others that lack countermeasures in the form of deterrence. For instance, Israel's nuclear weapons, not officially acknowledged but widely known, suit Israel as a deterrent against offensive

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behavior by its surrounding Arab neighbors and as a possible "Samson" option on the cusp of military defeat leading to regime change.¹²

Third, nuclear weapons permit states lacking the resources for advanced technology conventional military systems to compete with declared major powers. Russia is the most obvious example of this syndrome. Without its nuclear arsenal, Russia would be vulnerable to nuclear blackmail, or even to conventional military aggression, from a variety of strategic directions. Russia's holdover deterrent from the Cold War, assuming eventual modernization, guarantees Moscow military respect in Europe and makes its neighbors in Asia more circumspect.¹³ North Korea is another example of a state whose reputation and regard are enhanced by its possible deployment of nuclear weapons and potential deployment of long range ballistic missiles.¹⁴ Without nuclear capability, North Korea is a politically isolated rogue state with a bankrupt economy that would receive almost no international respect. But as an apparent nuclear power, North Korea has played "nuclear poker" with a five-nation coalition attempting to disarm its program by peaceful means: the US, Russia, Japan, China, and South Korea.15

The power transition from the second to the third generation of the Kim family regime in North Korea has given further rise to concern over nuclear proliferation in Asia. In an agreement signed with five powers in February 2007, North Korea promised to shut down its nuclear reactor at Yongbyon and to admit international inspectors into the DPRK to verify compliance within 60 days. For taking this step, North Korea was to receive an emergency shipment of fuel oil from the United States, Russia, China, and South Korea. The first phase of this pact thus froze the North Korean plutonium-based weapons program but left its suspended uranium-enrichment program for future discussions. In September 2007 North Korea agreed to declare and disable all of its nuclear programs by the end of the calendar year 2007.¹⁶

However, in keeping with a North Korean trend, backsliding relations with its nuclear interlocutors and shifting sands in North Korean domestic politics have since stranded the six party talks into diplomatic stasis and arms control uncertainty. The death of Kim Jong-il and his succession by son Kim Jong-un in December 2011 focused world attention on the implications of a power transition within a regime of uncertain stability and military and strategic provenance.¹⁷ In response to UN sanctions after its

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third nuclear test in February 2013 and to joint military exercises between the United States and South Korea, North Korea launched a bombastic diplomatic offensive in which it declared the 1953 Korean armistice null and void and threatened nuclear strikes against South Korea, US Pacific bases, and American state territory (although experts said North Korea lacked the technology for nuclear strikes against the continental United States).¹⁸

Failure to contain proliferation in Pyongyang could spread nuclear fever throughout Asia. Japan and South Korea might seek nuclear weapons and missile defenses. A pentagonal configuration of nuclear powers in the Pacific basin (Russia, China, Japan, South Korea, and North Korea – not including the United States, with its own Pacific interests) could put deterrence at risk and create enormous temptation toward nuclear preemption. Apart from actual use or threat of use, North Korea could exploit the mere existence of an assumed nuclear capability in order to support its coercive diplomacy.¹⁹ In Paul Bracken's terms, North Korea can use its nuclear weapons to support either a "strategy of extreme provocation" or one intended to "keep the nuclear pot boiling" without having crossed the threshold of nuclear first use.²⁰ In October 2013 there were reports of the DPRK renewing nuclear activities, and perhaps preparing for new nuclear tests.

A five-sided nuclear competition in the Pacific would be linked, in geopolitical deterrence and proliferation space, to the existing nuclear deterrents of India and Pakistan, and to the emerging nuclear weapons status of Iran. An arc of nuclear instability from Tehran to Tokyo could place US proliferation strategies into the ash heap of history and call for more drastic military options, not excluding preemptive war, defenses, and counter-deterrent special operations. In addition, an unrestricted nuclear arms race in Asia would most likely increase the chance of accidental or inadvertent nuclear war. It would do so because: (a) some states in the region already have histories of protracted conflict; (b) states may have politically unreliable or immature command and control systems, especially during a crisis involving a decision for nuclear first strike or retaliation; (c) unreliable or immature systems might permit a technical malfunction resulting in an unintended launch, or a deliberate but unauthorized launch, by rogue commanders; (d) faulty intelligence and warning systems might cause one side to misinterpret the other's defensive moves to forestall attack as offensive preparations for attack, thus triggering a mistaken preemption.

China Looms Large

The rising economic and military power of China relative to that of the United States and other nuclear weapons states must also be considered when assessing the changing geopolitical arena. China's growing economy and its strengthened military forces will almost certainly lead to greater Chinese assertiveness and influence in the Asia-Pacific region over the course of the next several decades. Viewed from the standpoint of some classical international relations theory, China is a rising power posing a potential threat to an existing hegemon, at least regionally and perhaps globally. One expert analysis of US-China relations from the perspective of power transition identifies three sets of outcomes or scenarios that might occur between now and mid-century: (1) a deadly contest for change, (2) a peaceful changing of the guard, or (3) a reluctant accommodation.²¹ This geostrategic competition need not end in war. In the short term, Chinese economic modernization requires a period of sustained development uninterrupted by major interstate war. In addition, in the long term, a power transition between the United States and China will most likely require China to apply the principle "at odds, but not at war" to its relationship with the US. As David Lai explains, "Indeed, in a power transition process, if the upstart sees that its comprehensive national power will surpass that of the extant hegemonic power by virtue of its expected development, it will be foolish for the rising power to initiate a premature fight with the latter."22

There are other possible axes of competition and conflict in the region in which China could become embroiled. Russia and Japan are two competitors for regional influence against China, and the possibility of an outbreak of local or large scale war between China and Russia or between China and Japan is not precluded. Russia's large combined arms military exercise in the Siberian Far East, Vostok-2010, was designed in part to test the readiness of its reformed armed forces, especially its brigade-based ground forces aspiring to advanced conventional operations and a Russian version of network-centric warfare. Although Russian officials designated the opponent in these exercises as hypothetical, it was difficult to escape the conclusion that the Chinese People's Liberation Army (PLA) was on the minds of Russian military planners. Jacob W. Kipp noted: The air and ground exercises near Chita and Khabarovsk make no sense except as responses to some force threatening the territorial integrity of Eastern Siberia and the Far East. The only forces with the military potential to carry out air and ground attacks that deep into Russian territory are the PLA in support of the so-called separatists identified in the scenario.²³

Thus far, we have discussed the problem of an Asian nuclear arms race as an abstract, albeit alarming, problem. The following sections of the paper will analyze the issue further by exploring two contrasting scenarios: a proliferation-constrained model, in which a multilateral agreement among nuclear weapon states and others essentially freezes the status quo in long range nuclear weapons deployments; and an unconstrained Asian nuclear arms competition leading to the addition of new nuclear weapon states and potentially more instability in Asia.

Asian Nuclear Arms Race Scenarios

Scenario 1: Constrained Nuclear Proliferation

A multilateral agreement on nuclear arms limitations and/or reductions would have to establish some rank order among existing nuclear weapons states and close the door to admission of others. Preferably, it would also negotiate the successful dismantlement of North Korea's nuclear weapons and infrastructure. A rank order among the remaining nuclear weapons states might be established as follows: for the United States and Russia, an upper limit of 1,000 operationally deployed long range nuclear weapons each; for China, France, and the UK, a ceiling of 500 weapons; and for India, Pakistan, and Israel, a limit of 300. States would have to count all weapons deployed on either intercontinental or intermediate range launchers, but not on missiles or bombers of shorter range. Obviously some agreed mechanism of monitoring and verification would have to be established, perhaps through the IAEA (International Atomic Energy Agency) and its program of inspections.

This scenario calls for a considerable amount of cooperation among the P5 (the permanent members of the UN Security Council, which also happen to be the first five members of the nuclear club), and may well encounter difficulty among the various military chiefs of staff. However, the sacrifices being asked of states under this regime are small if it means

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preventing an unregulated market for nuclear weapons in Asia and the Middle East. With an enforceable agreement of this sort in place, the UN and the IAEA would have additional credibility and clout in bringing pressure to bear against aspiring or nascent nuclear proliferators.

Would the preceding arrangement among existing nuclear weapons be deterrence stable and/or crisis stable? Figure 1 illustrates the constrained proliferation model at work and presents the numbers of weapons assigned to the various states in the model.²⁴



ICBM – intercontinental ballistic missile SLBM – submarine-launched ballistic missile AIR – air-delivered weapons

Figure 1. Constrained Proliferation Model: Total Strategic Weapons

Figure 2 displays the numbers of second strike surviving and retaliating weapons available to each state, given reasonable assumptions about the capabilities of attackers and defenders with notional forces and the recognition that nuclear forces are deployed primarily for the purpose of deterrence. No one can predict with full certainty how they would perform under the stress of a two- or many-sided nuclear war.



GEN – generated alert DAY – day-to-day alert LOW – launch on warning ROA – ride out the attack

Figure 2. Constrained Proliferation Model: Surviving and Retaliating Weapons

Figures 1 and 2 show that although all states retain sufficient numbers of surviving and retaliating warheads with the potential for stable deterrence, larger arsenals have more survivable redundancy. Whether this range among states, post-attack, would matter in a world having witnessed the first nuclear weapons fired in anger since Nagasaki, is a question with both scientific and ethical components. In the best of all worlds, the constrained proliferation model would provide for a degree of deterrence and crisis stability sufficient to retain the nuclear taboo or de facto abstention from nuclear first use well into the third decade of the twenty-first century.

Figure 2 shows that it is at least possible for this constrained proliferation regime to provide for deterrence stability based upon assured retaliation; crisis stability, however, is a little harder to assess. Figures 1 and 2 indicate that in the constrained proliferation model states can provide for sufficient degrees of crisis stability – if their nuclear-capable forces are duly responsive to authorized commands and are beyond political usurpation or malfunction. At the very least, it can be said that the model does not exclude this optimistic scenario.

On the other hand, political leaders and their military advisors, and not some magic system or process, will determine whether any particular multipolar nuclear regime will succeed or fail in preserving crisis stability. Therefore, on top of their disinclination toward a nuclear preemptive attack, states should provide for a margin of error in the performances of their nuclear alerts, response system, and command and control networks. In this regard, states might prefer to emphasize force structures that are less dependent upon prompt launch for survivability – sea-based ballistic missiles compared to land-based ones, for example, or mobile land-based missiles compared to silo-based missiles. States contiguous to prospective enemies will be especially prone to first strike fears unless they have well protected forces and command systems buffered against "decapitation" attacks,²⁵ attacks intended to paralyze or destroy the opponent's political and/or military command and control system, apart from, or in addition to, any attacks on nuclear or conventional forces, populations, or other targets.

Scenario 2: Asian Nuclear Arms Race

What would a nuclear arms race in Asia look like in 2020 or thereafter? If proliferation in Asia is successfully contained or rolled back, by political or by military means, the threat of an arms race declines and there is no need for speculation. However, if we assume a more pessimistic future in which proliferation is not contained, the third decade of the twenty-first century might witness an eight-sided nuclear club of states in Asia and/ or the Middle East, including Russia, China, Japan, North Korea, South Korea, India, Pakistan, and Iran, with the ability to contribute to nuclear destabilization in Asia (other possibilities for nuclear weapons proliferation exist, especially in the aftermath of Iran becoming a declared and de facto nuclear weapons state, led by Saudi Arabia, Turkey, and Egypt). Although this scenario does not contain proliferation, it does not automatically result in war. The assumption that nuclear weapons can spread among these states without war necessarily ensuing will be questioned by some, and with some justification. For example, the US has declared that an Iranian or a North Korean nuclear capability is presently unacceptable: the former must be prevented, and the latter must be rolled back. In addition, some experts would surely argue that China would never accept a Japan armed with nuclear weapons.

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On the other hand, the rollback of North Korea's nuclear program is far from a certainty: a complicated international bargaining process may leave the DPRK as a standing nuclear power, with a trade-off including more glasnost on the part of the regime, a willingness on the part of Pyongyang to adhere to some international arms control agreements, and economic assistance from the US and other powers to help rebuild North Korea's collapsed economy. As for the Iranian nuclear case, both Israel and the United States have obliquely threatened preemption (presumably with conventional weapons) against Iran's nuclear infrastructure and against any nuclear capable military forces, but the costs of carrying out the threat of preemption against Iran must be factored into the equation.²⁶ Unlike Iraq, Iran is a large state and cannot be conquered and occupied by outside powers. Iran could also reconstruct any destroyed nuclear power plants or other infrastructure. An additional consideration is political: any Israeli preemption against Iran becomes a recruitment poster for another holy war by jihadists against Israel. Iran is one of the major sponsors of Hizbollah and other groups that have carried out past terror attacks in Israel. An Israeli preemption against Tehran might therefore spark a new conflagration or otherwise destabilize the peace process.

The point is that many uncertainties loom, and the exclusion of any specific candidate from the future nuclear club is not automatic. Therefore, the analysis below includes eight current and prospective nuclear weapons states located in Asia (or in the Middle East but potentially contributory to nuclear instability in Asia) and assigns to them notional forces.

Assume that the older and newer nuclear forces are deployed without treaty constraints. Russia, for example, would feel free to exceed its New START-limited ceiling of 1,550 operationally deployed warheads on launchers of intercontinental range. At the same time, Russia's capacity for nuclear force building and modernization is not unlimited and may fall short of the most ambitious goals set by President Putin and military industry head Dmitri Rogozin.²⁷ Russia would seek to maintain its perceived status as a nuclear weapon state of the same rank as the United States, and therefore would want to appear as the strongest nuclear military power in Asia, relative to potential regional rivals. In this scenario, Russia and other nuclear powers are assumed to have freedom to mix various types of launch platforms among land-based, sea-based, and air-launched weapons. Cruise missiles are omitted from the present analysis for purposes of

simplification, but it is important to note that as cruise missiles become smarter, stealthier, and more widely available, they could be a preferred weapon for some states if capped with nuclear charges, compared to ballistic missiles.

States with nuclear capabilities in this scenario include Russia, China, Japan, India, Pakistan, North Korea, South Korea, and Iran. Although some might object to the inclusion of Japan, others will likely accept Japan as a nuclear weapon state for at least three reasons. First, Japan has a post-World War II history of military pacifism, and memories of its World War II and earlier aggressions against regional rivals have faded somewhat. Second, in terms of its political objectives within the international system, Japan is more of a status quo than a revisionist actor, and therefore, it can be assumed that a Japanese nuclear weapons capability would be no more threatening than that of Britain or France. Third, a nuclear armed Japan could assist in the containment of China (along with India and Russia).²⁸

Other arguments, however, suggest that Japan is not likely to obtain nuclear weapons in the first place. First, Japan has the extended deterrence protection of the US nuclear umbrella and is sharing technology development for missile defenses with the United States. Second, public opinion in Japan remains skeptical about the need for a nuclear weapons capability and the risk that it would entail. Even political elites in Tokyo who favor a more assertive Japanese defense policy in general are burdened by the recent national tragedy of the Fukushima nuclear disaster in March 2011.²⁹ Third, for historical and political reasons China would regard a nuclear Japan supported by the United States as a major threat to its own national security, perhaps increasing China's military buildup and adversely impacting upon US Chinese relations.

Figure 3 charts the forces deployed and available to the various state parties in the Asian arms race model presented. It is obviously impossible to project their future forces in detail. We have taken the heuristic shortcut of assigning generic kinds of forces by category of launch system: land-based missile, submarine- launched missile, and bomber. In addition, deployed nuclear-capable missiles and bombers are not necessarily assumed to have intercontinental ranges. Some states in the model will be more concerned with contiguous and regional rivals capable of being attacked by short, medium, and/or intermediate range missiles and aircraft, than they will be about intercontinental or transoceanic attack capabilities.





ICBM – intercontinental ballistic missile SLBM – submarine-launched ballistic missile AIR – air-delivered-weapons

Figure 3. Asian Arms Race Model: Total Strategic Weapons

Each nation would have to plan for the likelihood that only a portion of its forces would survive a nuclear first strike, retaliate, and arrive at their assigned targets. The numbers of each state's second strike surviving and retaliating forces following notional first strikes are summarized in figure 4.

Several findings are significant. From the standpoint of deterrence stability, there is no clear measure by which one can say that a specific number of additional nuclear powers will equate to a certain degree of decline in deterrence. In theory, it is not impossible for a many-sided nuclear rivalry, even one as regionally robust as the one presented in this case, to be stable. Provided it has the resources and the technical knowhow to do so, each state could deploy sufficient numbers of "second strike survivable" forces to guarantee the "minimum deterrent" mission, and perhaps the "assured destruction" mission as well.

Both "minimum deterrence" and "assured destruction" are terms that overlap in practice. Assured destruction (or assured retaliation) forces are second strike forces sufficient under all conditions of attack to inflict "unacceptable" societal damage. Unacceptable varies with the recipient of



GEN – generated alert DAY – day-to-day alert LOW - launch on warning ROA – ride out the attack

Figure 4. Asian Arms Race Model: Surviving and Retaliating Weapons

the damage and depends on cultural values and political priorities. But it would be safe to assume that the decapitation of the regime and the loss of at least 25 percent of its population and/or one half of its industrial base would satisfy the requirements of assured destruction for "rational" or at least sensible attackers.

Minimum deterrence is a standard presumably less ambitious than assured destruction: it requires only that the defender inflict costs on the attacker that would create enough pain to make the gamble of an attack insufficiently appealing.³⁰ For example, during the Cold War, the French nuclear retaliatory forces were unable to deter a Soviet attack on NATO independently, but they might have deterred nuclear blackmail against France separately by threatening Moscow with the prospect of "tearing an arm off," or destroying several Soviet cities. Some expert analysts have suggested that a minimum deterrent strategic nuclear force for the United States might be maintained with as few as several hundred operationally deployable weapons.³¹ Former US National Security Advisor McGeorge

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Bundy put forward the most assertive definition of minimum deterrence in his argument that ten nuclear weapons on ten cities would be a "disaster beyond history."³²

Although the projection of past events into future scenarios is always perilous, something like the July crisis in Europe in 1914 could erupt in Asia once nuclear weapons have been distributed among eight major states with high military stakes in Asia and in numbers sufficient to tempt crisis-prone leaders. National or religious hatred, for example, could be combined with the memory of past wrongs and the fear of preemptive attack leading to first use. This could occur not only between dyads of states but between allies, as it did on the eve of the First World War.

Coalitions might form among a nuclear armed China, Pakistan, North Korea, and Iran, lined up against Russia, the US, South Korea, and India. This would be an alignment of mostly market democracies against dictatorships or authoritarian-type regimes. Another possibility would be conflicts between dyads within, or across, democratic and dictatorial coalitions: for example, rivalry between North Korea and South Korea, or between India and Pakistan. Russia might find itself in bilateral competition or conflict with China, or China with India. Iran might use its nuclear capability for coercion against US allies, such as Saudi Arabia or Israel, drawing American political commitments and military power directly into a regional crisis.

Putting this scenario aside, it remains the case that nuclear weapons are in a class of their own as instruments of prompt mass destruction. Therefore, what is important is not the numbers of nuclear weapons, but the possible effect of leaders' perceptions that higher alerts and faster launches are necessary in order to avoid catastrophic defeat, should war occur. There are no "winnable" nuclear wars depicted here, nor would there be, even if agreed levels among the powers were reduced to several hundreds of warheads.³³ The danger is that a war might begin not so much from deliberation, but from desperation in a situation in which states, feeling that their nuclear deterrents are threatened, make a hasty decision under pressure that permits neither reflection nor appropriate inspection of the information at hand.

Assessment

Stability in a region of states armed with nuclear weapons resides mainly in the policies of these states and in the intentions of their leaders. The number of nuclear armed states in a region does not by itself determine the probability of nuclear crisis or war. Nonetheless, nuclear complacency is ill advised. Regional rivalries, including ethno-nationalist and religiously inspired disagreements, combine dangerously with weapons of mass destruction, from the standpoint of international security and stability. A crowded nuclear Asia also threatens to expand regional rivalries into global confrontations because the Asian nuclear club includes nuclear weapons states with global ambitions. US military planners must also assume that the spread of nuclear weapons in Asia will increase the appeal of antiaccess, area denial (A2AD) strategies, supported by enhanced conventional weapons and command and control capabilities for regional actors.

Nuclear forces may be deployed and operated with more or less sensitivity to the problem of provocative crisis behavior. According to Lawrence J. Korb and Alexander Rothman, the United States should adopt an unconditional "no first use" policy for its nuclear weapons and urge other nuclear weapons states to do likewise. An agreed multilateral "no first use" policy would help prevent an outbreak of nuclear war in Asia and contain such a war if it occurred.³⁴ On the other hand, a unilateral US declaration of this sort, without support from other nuclear weapon states, could weaken US extended deterrence now provided to non-nuclear allies, possibly compromising the NPT and encouraging formerly US-protected allies to develop their own nuclear weapons arsenals.

As a variant on this theme, Paul Bracken has proposed a US declaratory policy of "no first use, guaranteed second use." If any other country were to use the bomb first against the United States, or against any allied state, the United States would guarantee second use against the attacker.³⁵ This modified version of "no first use" might put some additional teeth into a declaratory policy that might otherwise inspire doubt or cynicism. On the other hand, the "no first use, guaranteed second use" stance could tie the hands of policymakers if a US ally were the first to use a nuclear weapon against another state that otherwise threatened to inflict upon it a decisive conventional military defeat or regime change.

No first use declarations also make no distinctions among the sizes of nuclear weapons used or their presumed purposes. Would, for example, a Military and Strategic Affairs | Volume 6 | No. 1 | March 2014 | 9

demonstration shot above the territory of a state that causes no terrestrial damage or casualties count as first use (although it might damage electronics or space based assets)? Would a state that either insufficiently guards its nuclear weapons and materials, or demonstrates outright complicity with terrorists, thus leading to a terrorist nuclear attack, be guilty of nuclear first use requiring an obligatory second use? A safer version of declaratory policy is probably one that leaves options open and vaguely defined.

Declarations by themselves are useful but fall short of fulfilling the requirements for stable nuclear deterrence. Countries must see a prior pattern of credible diplomatic-strategic behavior on the part of those powers who favor system stability, as compared to those powers who seek to overthrow or amend the existing order. Credible diplomatic-strategic behavior related to nuclear deterrence is twofold. First, it lies in having a coherent national security strategy, detailing aspects relevant to the exercise of deterrence and the use, or threat, of force. Second, it rests on the availability of viable strategies and responsive forces for the use, or threat of use, of force under conditions of peacetime, crisis, and wartime exigency. Of special importance in containing nuclear proliferation and/ or misbehavior on the part of proliferators is the need for understanding the military-strategic cultures of those whose nuclear first use must be deterred. Here the concern is that Western powers may not correctly read the mindsets of regional nuclear or nuclear-aspirational states until a regional crisis escalates into a war, and possibly, into a nuclear war. The mind of the enemy (or possible enemy) is the ultimate target of deterrence and other strategies for military persuasion or coercion. A multipolar nuclear system, like the hypothetical Asian arms race illustrated here, is dangerous not only because of the numbers of weapons or the numbers of nuclear armed states, but primarily given the potential for misperception that exists when leaders in crisis situations are tasked to make fast decisions with potentially lethal consequences. Additionally, cultural differences may come into play leading to false assessments of the case.

For the United States and its military planners, the conclusions emerging from this analysis suggest the following recommendations. First, the US will need to manage future challenges to deterrence and crisis stability in the Middle East and in South and East Asia by maintaining and improving a new strategic "triad" of: (1) long range nuclear and conventional offensive weapons and delivery systems, (2) anti-missile and air defenses, both theater and strategic, and (3) offensive and defensive cyber weapons. Second, the US will also need to exercise deterrence and defense against regional Anti-Access/Area Denial strategies by maintaining escalation dominance in the aerospace and maritime continua, relative to probable regional opponents. Third, US diplomacy must support selective and multilateral military intervention that combines carrots (information operations or "the battle for the narrative") and sticks (the credible threat of use of effective and tailored military force, if necessary).

Notes

- 1 For contrasting perspectives on this issue, see Kenneth N. Waltz, "More May Be Better," in *The Spread of Nuclear Weapons: A Debate*, eds. Scott D. Sagan and Kenneth N. Waltz (New York: W. W. Norton, 1995), pp. 1-45, and Scott D. Sagan, "More Will Be Worse," in *The Spread of Nuclear Weapons*, pp. 47-91.
- 2 Lawrence J. Korb and Alexander Rothman, "No First Use: The Way to Contain Nuclear War in South Asia," *Bulletin of the Atomic Scientists* 68, no. 2 (2012): 34-42, see particularly p. 35.
- 3 For expert commentary on these three kinds of stability, see Elbridge A. Colby and Michael S. Gerson, eds., *Strategic Stability: Contending Interpretations* (Carlisle, PA: Strategic Studies Institute, US Army War College Press, February 2013).
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- 24 Grateful acknowledgment is made to Dr. James Scouras for use of his AWSM@ model for making calculations and drawing graphs in this study. Dr. Scouras is not responsible for any analysis or arguments herein.
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