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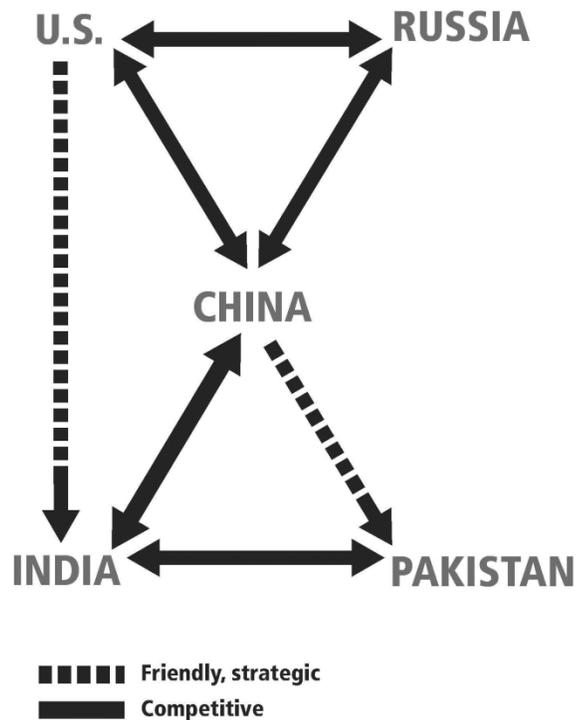
Mr. Chairman, members of the subcommittee, it is an honor to testify before you. I have worked on nuclear-weapons-related issues since 1982, first with a focus on the Soviet Union, then, after 1992, on India, Pakistan and Iran. I have written extensively on each of these countries' nuclear programs and policies. Over the past ten years I also have analyzed nuclear dynamics in Northeast Asia, particularly Chinese and Japanese perspectives on them.

Because time here is short and the range of topics you have asked my colleagues and me to address is extensive, I concentrate my testimony on what I think are some cutting-edge strategic challenges in Northeast Asia and South Asia that need to be more creatively addressed by U.S. policy-makers. These are problems to which no one has tidy, feasible solutions – that is, solutions that would change to our complete satisfaction the military capabilities and behaviors we want other states to change, and thereby significantly reduce risks of conflict that could escalate to the use of nuclear weapons. This is largely because the other states involved have different interests and objectives than the U.S. does and will search for ways to pursue them. Knowing that they cannot compete directly and symmetrically with U.S. conventional and strategic forces, these states will often seek to develop and apply asymmetric capabilities and strategies to balance U.S. power. This is especially true of two of the states under consideration – the DPRK and China – whose governments fear the U.S. seeks ultimately to displace them. The challenge, then, for the U.S. and these states is to achieve tolerable stability, avoid escalatory warfare, and establish ways of getting along through political-diplomatic processes backed by balances of power.

I have divided my testimony into five key points that describe the regional dynamics at play and suggest priority policies the U.S. could pursue to mitigate instabilities and risks of nuclear escalation.

1. Complex causal dynamics drive the threat perceptions and nuclear requirements and policies of states in Northeast Asia and South Asia.

This is an analytic and conceptual point that must be recognized if the U.S. and others are to devise policies and deploy capabilities that will improve security and ameliorate instability in these two inter-related regions. Setting North Korea to the side for a moment, it may help to conceptualize the Northeast Asian and South Asian nuclear “system” in the form of two strategic triangles that are connected by a common node, which is China. The following diagram represents this idea.



The first triangle includes the U.S., Russia and China. Each of these state's nuclear requirements and policies (as well as non-nuclear instruments of force, deterrence and coercion) affects and is affected by the other two states. For example, the U.S. has long seen Russia as a benchmark for determining U.S. nuclear posture and policy, and recently has factored China more heavily into policy calculations, including regarding strategic conventional weapons, cyberwarfare capabilities, and ballistic missile defenses. China in turn calculates its strategic military requirements and options by reference to current and potential threats that it perceives emanating from the U.S., and to a lesser extent from Russia.

The second triangle includes China, India and Pakistan. India seeks strategic capabilities to deter major aggression from China and from Pakistan today and in the future. Many of the delivery systems and nuclear warhead capabilities India seeks are intended to increase its capacity to deter China, whose current and future capabilities in turn are driven in large part by perceptions of threat from the U.S. Pakistan then seeks nuclear and other capabilities to balance what it perceives India to be acquiring. Many Indian analysts perceive that China is assisting Pakistan's strategic acquisitions, so India seeks not only to balance China, but also to balance the gains Pakistan may achieve in cooperation with China. For its part, Pakistan increasingly perceives the U.S. and India to be cooperating in buttressing Indian military capabilities with which Pakistan must contend.

From the perspective of the United States, the main takeaway from this depiction of the strategic force dynamics involving these states is that policies, capabilities, and operational plans we develop to affect one of these states may cause others also to react in turn.

For example, a former commander of India's strategic forces recently explained to me that "what the U.S. does to extend deterrence to its allies in East Asia affects China which then acts in ways that challenge India. The Chinese note and build up capability, strategy and philosophy to deal with what the U.S. is doing. The Chinese have deployed large numbers of conventionally armed ballistic missiles and cyber capabilities and anti-satellite weapons to deny U.S. forces access into areas sensitive to them, primarily around Taiwan. Those capabilities could be used against India, too."

Pakistanis constantly assert that the so-called U.S.-India nuclear deal could significantly boost India's stockpile of fissile material that could be used to build up its nuclear forces. Similarly, they say, potential U.S. cooperation with India on ballistic missile defenses could require Pakistan to further increase the numbers and diversity of its missile armory and nuclear warhead inventory.

Of course, much the same could be said about China's cooperation with Pakistan and Russia's cooperation with India. This is not to suggest that the U.S. and these other states should desist from all such policies and activities. Rather, the point is that these policies and activities are inter-related more than is commonly recognized. If strategic instability is going to be redressed in Northeast and South Asia, each state, including the U.S. must be more willing than they heretofore have been to acknowledge and address how their own capabilities and actions affect the others. Among other things, this means that prospective policies must be considered in a regional context, not merely a bilateral one.

2. Regarding China, the most fundamental challenge for U.S. policy is to engage Beijing in tempering several forms of security dilemmas and affirming that neither state will initiate the use of force to change the territorial status quo in Northeast and South Asia.

In John Herz's famous words (at least amongst wonks), the security dilemma is "A structural notion in which the self-help attempts of states to look after their security needs tend, regardless of intention, to lead to rising insecurity for others as each interprets its own measures as defensive and measures of others as potentially threatening."

The U.S. and China confront security dilemmas of their own making in at least three domains.

One pertains to concerns of the U.S. and its protectorates – most acutely Taiwan and Japan – that China may use its growing economic and military power to coerce them in territorial and political disputes. China, for its part, has countervailing concerns that the U.S. and its allies may seek to apply military power to advance their preferred positions vis a vis China, particularly in case of a crisis over the political evolution of Taiwan as it relates to China. (China has a deeper concern that the U.S. seeks to subvert its political order and foster democratization. It is difficult for the U.S. to convince Chinese leaders that while we desire political change in their country we

do not intend to use our military capabilities and policies to bring this change about). The famous “three communiques” issued by the U.S. and China between 1979 and August 1982<sup>1</sup> created a modus vivendi on these questions related to Taiwan, but both countries remain wary that it could be fragile. Each side in this security dilemma builds military power, and, in the U.S. case occasionally sells arms to Taiwan. Each also sometimes makes political declarations intended to preserve its defensive positions, but which the other side may interpret as expressions of intent to change the status quo.

A second security dilemma arises from each side’s build-up of non-nuclear forces – conventionally-armed ballistic missiles, naval and air forces, ballistic missile defenses, and cyberwarfare capabilities – which each justifies as means to defend against the presumed offensive intentions of the other. This dynamic creates arms race instability, whether of a symmetric or asymmetric nature. For example, China for years has steadily augmented its arsenal of conventionally-armed ballistic missiles and anti-satellite weaponry to offset the United States’ superior naval power projection capabilities. The United States’ ongoing ballistic missile defense program can be seen as an effort to maintain a long-standing asymmetric advantage in the nuclear domain, and as a way to offset China’s build-up of conventionally armed ballistic missiles. Both states, led by the U.S., are developing conventional prompt-strike weapons. Additionally, the U.S. and China both are engaged in a cyberweapon arms race, with China trying to catch up to the U.S.

A third security dilemma exists in the domain of nuclear policy. China fears that the U.S. seeks to acquire means to negate its nuclear deterrent, through some combination of offensive nuclear forces, future hypersonic conventionally-armed missiles, ballistic missile defenses, and cyberwarfare capabilities.

China is assessed to possess approximately 250 nuclear warheads. It is assessed to deploy between 50-75 ballistic missiles capable of carrying nuclear weapons to the United States, and another approximately 60 intermediate range ballistic missiles suited for use against India, Japan or Taiwan. By comparison the United States’ operationally deploys 2,200 nuclear weapons. China is estimated to possess an additional 16 tonnes of highly-enriched uranium and 1.8 tonnes of non-civilian separated plutonium, compared to the United States’ stockpile of 604 tonnes and 87 tonnes, respectively. The U.S. and its proteges fear that China may someday add dramatically to its nuclear forces in ways that would undermine – along with conventional anti-access area-denial capabilities – the American deterrent extended to Taiwan and Japan. Each side in this competition does not adequately acknowledge how its own actions drive the other to take the actions that it sees as threatening.

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<sup>1</sup> The third communique, in August 1982, states in part: “The United States Government attached great importance to its relations with China, and reiterates that it has no intention of infringing on Chinese sovereignty and territorial integrity, or interfering in China's internal affairs, or pursuing a policy of "Two Chinas" or "one China, one Taiwan." The United States Government understands and appreciates the Chinese policy of striving for a peaceful resolution of the Taiwan question as indicated in China's Message to Compatriots in Taiwan issued on Jan. 1, 1979, and the nine-point proposal put forward by China on Sept. 30, 1981.”

To deal with these challenges, the U.S. does not need more or different nuclear forces than it already possesses and plans to possess after implementation of the New Start Treaty with Russia. In terms of capabilities, the greater imperative is to acquire and/or deploy non-nuclear instruments to preserve the United States' capacity to quickly defend its protectorates against and to deter Chinese actions to initiate changes in the territorial status quo in the region. Such potential Chinese actions are very unlikely to involve its nuclear forces, and it is thus in the U.S. interest to counter with strong, symmetrical conventional capabilities.

A more immediately pressing need is to motivate Chinese leaders to join the U.S. and, where appropriate its allies, in articulating and authenticating policies that would reassure all sides in these security dilemmas that they will not initiate the use of force to change the territorial or political status quo or to otherwise coerce each other. To this end, it will be necessary for Chinese officials to understand the concept of the security dilemma and recognize how their words and deeds sometimes exacerbate it.

With regard to nuclear policy, the key dilemma concerns first-use of nuclear weapons. Retaliatory use of nuclear weapons is a comparatively straightforward proposition; the destabilizing factor is the prospect that the U.S. or China would initiate attacks -- by nuclear, conventional, or cyber means -- on the other's nuclear deterrent forces and/or their command and control systems. The U.S. would be wise to overcome its politically motivated reluctance to assure China that it will not seek to negate China's nuclear deterrent. Washington should do this out of recognition that mutual nuclear vulnerability is a fact of 21<sup>st</sup> century life with China, and attempting to negate this fact through a combination of new offensive and defensive systems would not succeed at a cost that the U.S. would find acceptable to itself. The language authored by a 2009 Council on Relations Task Force on U.S. Nuclear Policy chaired by William Perry and Brent Scowcroft could be a model: "mutual vulnerability with China – like mutual vulnerability with Russia – is not a policy choice to be embraced or rejected, but rather a strategic fact to be managed with priority on strategic stability."

For its part, China should be motivated to reciprocate constructively by clarifying that as long as U.S. policies and military capabilities reflect this assurance China will not significantly increase its nuclear weapon arsenal and threaten to use force to alter the territorial status quo and/or resolve "the Taiwan question."

Such declarations of fundamental policy would not preclude the U.S., China, or other states from modernizing and bolstering their strategic offensive and defensive capabilities, but they would provide a framework within which each party could explain to the other how its actions are not inconsistent with fundamentally defensive intentions and assurances. This would be constructive on its own terms, and could eventually create conditions for possible negotiation of arms limitations.

3. One of the most complicated challenges facing U.S. policy-makers today is to reassure Japan that the U.S. has the resolve and capabilities to defend it against armed attack from China or any other state.

Extended deterrence is never easy to provide or depend upon. The protege often will fear that its protector will abandon it. At other times, the protege may fear that the protector will entrap it in a war that the protege would otherwise seek to avoid. The guarantor, on the other hand, must convince the protégé as well as the adversary that the guarantor will put its soldiers and citizens and treasury at risk in order to defend another. This is especially problematic insofar as the protege may itself act in ways that instigate a potential conflict, raising legitimate questions about whether the guarantor should or would invite the costs of coming to its defense in such a situation.

Extended deterrence is often conflated with extended *nuclear* deterrence. While it may be tempting to believe that the potential use of nuclear weapons always strengthens extended deterrence, the issue is problematic. Potential use of nuclear weapons in an escalating conflict can indeed strengthen the potency of the guarantor's deterrent against a potential aggressor. But the very destructiveness that this portends also can weaken the resolve of the guarantor state's population (should we trade Los Angeles for Taipei?) as well as the protege's population (if the U.S. uses nuclear weapons on China, China will respond first by targeting nuclear weapons at Japan). These possible reactions may tempt a potential aggressor into thinking that the mere threat of aggression that could escalate to nuclear use can split an alliance, or demonstrate the guarantor's weak resolve, constituting a bluff that may be called.

On the other hand, if the guarantor's resolve is unquestioned in the face of a countervailing nuclear threat, nuclear moral hazards may be created. Like a finance company whose managers believe that the government will bail them out if they face ruinous losses, the protege may take unwise risks in its policies toward its adversary, feeling that the nuclear threat proffered by the guarantor will deter the adversary from reacting forcefully. The protege also may under-invest in non-nuclear defensive capabilities that would otherwise obviate the need to resort to nuclear threats to deter the adversary, like a bank that does not maintain conservative levels of reserves to cover its commitments.

This sort of hazard has long affected the United States' relations with its NATO allies, most of whom do not meet their commitments to devote two percent of their GDP to defense. Japan, too, has not always carried its full share of the defense burden with the United States. Its defense spending declined between 2002 and the arrival of the new Abe government in 2013. Now Japan is pursuing plans for an increase in procurement of major systems, and the U.S. and Japan have intensified exercises and other cooperative activities to solidify defense in the East China Sea. Still, the national government in Tokyo has not successfully overcome local governments' reluctance to cooperate in relocating U.S. military bases on Okinawa. It is common in Washington to hear complaints that an administration is not doing enough to reassure Japan of the United States' commitment to defend it; it is less common to hear of even private congressional remonstrances to Japanese officials that they should do more to buttress the alliance materially *and* diplomatically (*vis a vis* Japan's neighbors). A careful complementarity is required to match increases in defense preparedness with political and diplomatic sensitivity to the concerns this can cause in states that experienced Japanese aggression in the 1930s.

These considerations can be applied to the issue that currently poses the greatest risk of potential conflict involving Japan and China, and implicating the U.S. as Japan's protector.

There is a cluster of islands and rock outcroppings in the East China Sea that Japan calls the Senkaku Islands and China calls the Diaoyu Islands. Japan incorporated the islands under the administration of Okinawa, in January 1895, during the first Sino-Japanese War. The U.S. took control of these outcroppings as a result of World War II, and returned them to Japanese control in 1972. China disputes Japan's right to sovereignty over these islands. The U.S. does not offer a judgment on the disputed claims to sovereignty, but says that the islands fall within the territory the U.S. is obligated by treaty to help Japan defend. The Japanese government in late 2012 bought the islands from a private owner, explaining that it did so to prevent the nationalist governor of Tokyo from acquiring and developing them. Reflecting the logic of security dilemmas, China intensified its contestation over the issue, and deployed naval vessels and aircraft around and over the islands in order to manifest its claim and pressure Japan to proceed carefully. A non-trivial risk now appears that either state could act physically to change the status quo on or around these islands, and/or that the naval vessels or aircraft could collide, as happened with a Chinese fishing vessel and a Japanese Coast Guard ship in 2010. Such collisions could create a severe crisis that the highly nationalistic Chinese and Japanese governments could find difficult to de-escalate.

Were such a crisis to occur when China and Japan are led by strength-projecting nationalistic figures, the U.S. would face excruciatingly complex challenges. The first priority would be to resolve the crisis diplomatically. But this could be very difficult to do, depending on the circumstances. Japan and China would dispute whose actors and actions were to blame for the precipitating action. If the U.S. did not take its ally Japan's side, whatever the merits of the case, some faction in Washington would decry the abandonment of an ally. And, if Japan were at fault and the U.S. did not acknowledge this for political-diplomatic reasons, China would become even more determined to press its claims on this dispute and others that involve U.S. allies. If evidence held that China was at fault, the political-diplomatic position of the U.S. would be simpler, but then the U.S. and Japan would likely find themselves in a potentially escalating conflict with China.

In either case, to augment diplomacy and strengthen deterrence, and to prevail in case diplomacy fails, the U.S. and Japan would need to have the conventional military means to prevent China from creating new "facts on the ground," for example by physically taking control of the islands. Failure to ensure this initial defense could create a situation where the U.S. and Japan would feel compelled to fight China to reverse its gain. Such a conflict could escalate and expand to a wider naval battle or blockade contest as each leadership would feel its credibility and political survival at stake. Were the U.S. and Japan not prevailing, someone in Washington or Tokyo would at least raise the prospect that the conflict could escalate to the use of nuclear weapons. After all, that's how nuclear deterrence is supposed to work. Yet, would even implying a nuclear threat be advisable and therefore credible? Would and should the United States be willing to risk nuclear war over uninhabited rocks in East Asia that 99 percent of the American people have never heard of and could not find on a map? Recall, the issue here would be first-use of nuclear weapons: if China, despite its commitment and force posture of no-first-use, took steps signaling that it would break the nuclear taboo, U.S. recourse to retaliatory nuclear weapons reasonably would be on the table. But threatening to *initiate* the use of nuclear weapons in conflict that erupted over these disputed outcroppings – no matter how far it escalated -- would constitute a profound over-reaction.

Japanese leaders and citizens may not appreciate this analysis. They may prefer to over-rely on the magic of nuclear deterrence. But statesmanship requires realism, dealing with facts and assessing strategic risks. Japan and the United States must recognize the imperative of developing and deploying diplomacy and conventional military power to prevent efforts by anyone to forcibly change the status quo surrounding this territorial dispute. The combination of clear commitments not to upset the status quo and demonstrable non-nuclear means to prevent anyone else from physically changing it constitutes the strongest possible extended deterrent, for it reaffirms a fundamentally defensive posture that augments national and international resolve.

The current and projected nuclear arsenal of the United States is more than sufficient to perform the physical requirements of extending nuclear deterrence to Japan against China. Nor is it evident that “strengthening” U.S. declaratory policy regarding the use of nuclear weapons would enhance (and not otherwise undermine) the feasibility and durability of the extended nuclear deterrent.

4. North Korea will not in the foreseeable future agree to relinquish all of its nuclear weapons and related capabilities. The near-term imperative should be to negotiate constraints on the buildup of DPRK nuclear capabilities and enforceable commitments not to transfer them to others.

Japanese and South Korean leaders are politically and psychologically unprepared to negotiate anything less than complete DPRK disarmament, for complex reasons. This in turn intensifies political pressures on any American administration not to deviate from this stated objective. This motivates North Korea to demand an exorbitant price for cooperation, which its interlocutors doubt the DPRK will fully implement in any case.

A more realistic alternative would be to bargain for incremental steps by the DPRK to stop increasing its nuclear stockpile and to eschew proliferation of nuclear materials and know-how to other actors. These forms of restraint by the DPRK could be more achievable at a lower price than the DPRK seeks for the illusory objective of total nuclear disarmament.

Acknowledging that DPRK will retain some nuclear weapons for the foreseeable future offends our sense of virtue, as does embarking on what amounts to a protection-racket arrangement to pay the DPRK for not damaging the neighborhood. But the perfect may be the enemy of the somewhat tolerable here: by acknowledging that the DPRK would retain a limited nuclear capability to satisfy its regime’s need to deter U.S. and other efforts to displace it, the U.S. and other negotiating parties would strengthen their leverage to obtain North Korean cooperation in mitigating its other threatening behaviors. Arguably, this is the best outcome that might be achieved today.

For such an adjustment in negotiating objectives to be sustainable, the U.S., Japan, South Korea, China and Russia would need to devise a formula that would affirm their ultimate goal to be the creation of a regional security environment free of nuclear weapons on the Korean Peninsula. Such a goal is necessary to satisfy the political-psychological needs of South Korea

and Japan. Yet, the prospect of freeing the Korean Peninsula of all nuclear weapons and (still to be defined) supporting infrastructure would be more realistic after the relevant parties had incrementally built mutual confidence by stopping the expansion of North Korea's nuclear arsenal and infrastructure and authenticating that the DPRK was not transferring weapons, material, and know-how to others.

In terms of U.S. nuclear force requirements and posture, the nuclear threat posed by the DPRK is a lesser-included challenge that can be more than adequately covered by nuclear (and non-nuclear) forces that the U.S. will retain as part of its larger requirement to deter Russia and China.

5. India and Pakistan will continue to augment their nuclear arsenals. The imperatives now are to prevent another major terrorist attack from Pakistan against India and reduce the risks of escalation to nuclear war.

South Asia is the most likely place nuclear weapons could be detonated in the foreseeable future. This risk derives from the unusual dynamic of the India-Pakistan competition. The next major terrorist attack in India, emanating from Pakistan, may trigger an Indian conventional military riposte that could in turn prompt Pakistan to use battlefield nuclear weapons to repel an Indian incursion. India, for its part, has declared that it would inflict massive retaliation in response to any nuclear use against its territory or troops. Obviously, this threatening dynamic – whereby terrorism may prompt conventional conflict which may prompt nuclear war -- challenges Indian and Pakistan policy-makers. India and Pakistan both tend to downplay or dismiss the potential for escalation, but our own history of close nuclear calls should make U.S. officials more alert to these dangers. The U.S. is the only outside power that could intervene diplomatically and forcefully to de-escalate a crisis.

India, is believed to possess approximately 90-110 nuclear weapons. It plans to deliver them via aircraft and/or a growing fleet of ballistic and perhaps cruise missiles. Available information suggests it keeps the nuclear bombs and warheads separate from their aircraft and missile delivery systems. With a historically entrenched doctrine of No First Use, and a strict insistence on civilian control over nuclear policy, India plans to mate weapons and delivery systems only when the need for their potential use appears imminent. While India retains significant quantities of plutonium outside of civilian control, which it conceivably could use to dramatically expand its nuclear arsenal, India thus far rejects ideas of nuclear war-fighting and corresponding development of a large nuclear arsenal, much as China does.

Pakistan is estimated to have 100-120 nuclear weapons, with a continually growing capacity to produce plutonium and highly-enriched uranium to expand this arsenal if it chooses to. Pakistan continues to add new missile delivery capabilities to its arsenal. Most noteworthy has been the development of the NASR 60-kilometre range missile, which Pakistan projects as a battlefield weapon to deter Indian ground-force incursions into its territory. Pakistan proffers the threat of initiating nuclear use if and when it would be necessary to defeat what it would perceive as Indian aggression from land, air and/or sea.

India faces two inter-related strategic challenges vis a vis Pakistan: to compel Pakistani authorities to curtail the operations of anti-Indian terrorists; and to deter Pakistan from engaging in escalatory warfare if and when India responds violently to a terrorist attack. The new prime minister of India, Narendra Modi came to power with a reputation for strong action, which he and his supporters juxtapose to the perceived weakness of his predecessors. Indeed, Modi's government recently unleashed the Indian Army to retaliate with disproportionate force against traditional Pakistani artillery shelling across the disputed Line of Control in Kashmir. Senior advisors to the prime minister have said that there should be little doubt he will respond forcefully if India is attacked again by terrorists associated with Pakistan.

The questions are, what strategy (or strategies) and capabilities would be *feasible and effective* to enable India to motivate Pakistan's security establishment to demobilize anti-India terrorist groups? If terrorist attacks cannot be prevented, how can India respond to them in ways that minimize risks of escalation that would be unfavorable to India?

Since the major Indo-Pak crisis of 2001-2002 following a terrorist attack on India's parliament building, Indians have debated options ranging from Army-centric ground thrusts into Pakistan, precision air strikes, covert operations, and non-kinetic efforts to isolate and sanction Pakistan.

Clearly, some actions that could most probably satisfy one of India's multiple domestic and bilateral objectives would lessen the chances of achieving others. For example, satisfying the desire to punish Pakistan could be achieved by a relatively wide range of military actions and international economic sanctions. But the more destructive of possible military actions could raise the overall scale and costs of the conflict to levels disproportionate to the harm done by the initial attack on India, and invite unwelcome international responses. For example, a successful ground campaign into Pakistan would be most likely to prompt Pakistan to use battlefield nuclear weapons to stop Indian forces and compel them to leave Pakistani territory.

No theories in the existing international literature or in other states' practices offer guidance regarding how India could most effectively proceed here. Studies of strategies and tactics to deter and defeat terrorism have not addressed situations when the major antagonists possess nuclear weapons. Theories and case studies of nuclear deterrence and escalation management in a nuclearized environment have not involved cases where terrorists with unclear relationships to one of the state antagonists are the instigators of aggression and the "unitary rational actor" model may not apply. The Indo-Pak competition features both sets of challenges with the added complication that third states – primarily the U.S. and China – also figure heavily in the calculations of decision-makers.

All of this has implications for U.S. policy-makers. Historically and today, the U.S. has not planned for its nuclear forces to serve deterring or war-fighting roles against Pakistan and/or India. Thus, South Asian scenarios do not figure in calculating the adequacy of U.S. nuclear forces.

However, there are possible scenarios in which the U.S. could become directly implicated in nuclear crises with Pakistan and/or between India and Pakistan. Pakistan fears that the U.S. in

certain circumstances might conduct military operations to capture or otherwise neutralize Pakistan's nuclear forces and fissile materials. Indeed, one of the most telling Pakistani reactions to the U.S. raid that killed Osama Bin Laden was to intensify efforts to hide and secure their nuclear assets. Some of these protective steps could be welcome insofar as they also could help secure Pakistan's nuclear assets against possible efforts by militant non-state actors or rebelling military units to capture them. This scenario – radicals in Pakistan acquiring nuclear weapons and/or fissile materials – has alarmed successive U.S. administrations. Given fears of nuclear terrorism, it would be reasonable for relevant U.S. government actors to aspire to have the precise intelligence and capabilities required to, in a crisis, locate Pakistan's nuclear assets and seek to remove or disable them. Whether the U.S. has the requisite capabilities cannot be gleaned from public sources, but the task would be extremely daunting given the number of Pakistan's nuclear weapons, the volume of its fissile material, and their dispersal to well-hidden and defended facilities.

In any case, while some Pakistani authorities might welcome a successful U.S. operation during an internal Pakistani crisis to keep the country's nuclear weapon capabilities from falling into the hands of anti-state groups, the possibility of such an operation would generally be seen as deeply threatening to Pakistan. Few would be confident that the U.S. would only intervene when it might be welcomed; all would worry that the U.S. might intervene in a very different scenario in which Pakistan was embroiled in a conflict with India. Indeed, the worst nightmare for Pakistani strategic planners is a combined U.S.-Indian effort to negate, or at least degrade, their nuclear deterrent.

This may seem far-fetched today, and I am unaware of scholarly or official analyses of such a possibility. However, I think the following questions suggest that it would behoove the U.S. government to work discreetly on this problem. If India and Pakistan become embroiled in a major military conflict following a major terrorist attack on India attributed to Pakistan, and the U.S. detects Pakistan to be readying nuclear forces for use, should the U.S. intervene to prevent the use of nuclear weapons?

Consider that the U.S. and India are now self-proclaimed strategic partners, and many thousands of Americans live in India or regularly visit it, reflecting ever-increasing U.S. commercial investments and interests in India. Consider also the large and prominent Indian-American community who feel passionately about their native home and participate ever more actively in American politics. If nuclear weapons were being readied for use, with a real prospect of escalation to nuclear war between India and Pakistan, would U.S. leaders feel they should simply stand back and watch? If, God forbid, nuclear weapons were detonated and Americans were among the casualties, would not Congress demand an inquiry to learn "what did the president know and when did he know it, and why did he or she not act to try to prevent it?" Would there not be an expectation that the government had done contingency planning for such an emergency, given how long Pakistan and India have had nuclear weapons and how central the U.S. has been in resolving earlier crises between them?

Members of Congress are much better positioned to answer these questions than I am. But I would wager that there is some prospect that U.S. leaders would at least be expected to

have prepared for such a contingency, even if the preparations concluded there was little that could be done physically to prevent it.

Indeed, we should assume that Pakistani military strategists are thinking of scenarios in which the U.S. might alone, or in cooperation with India, intervene in a looming nuclear conflict to stay Pakistan's hand. In this case, Pakistani planners will be considering whether and how they could deter the U.S. from such intervention. Of course, inviting war, possibly nuclear war, with the United States would be a terrible risk. But in a scenario in which Pakistani military leaders were considering nuclear war with India already, and the U.S. was seen to be denying this recourse to a perceived existential necessity, this could be a risk that they could be willing to threaten to run.

I close by suggesting that, as in the earlier discussion concerning Northeast Asia, the nuclear challenges in South Asia will not be redressed by more or newer U.S. nuclear weapons or changes in U.S. nuclear doctrine. There is no evidence to the contrary. The most immediately pressing objective of U.S. policy should be to apply vigorous, creative diplomatic and political energy to prevent another crisis between India and Pakistan, and if one cannot be prevented, to enhance the preparation of Indian, Pakistani and American officials to manage it with minimal escalation.