
Viewpoint

Managing South Asia's Nuclear Rivalry: New Policy Challenges for the United States

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The evolving strategic competition in South Asia poses an unprecedented challenge for U.S. policymakers who believe that “open-ended nuclear weapon and missile programs in India and Pakistan threaten regional and international security and increase the risk of onward proliferation from the region.”² Today India and Pakistan are racing to modernize, expand, and operationalize their nuclear deterrent capabilities. Several decades of international nonproliferation measures helped to delay, but not prevent, their testing and overt production of nuclear weapons and ballistic missiles. In the past, the United States learned how to deal with both allies (the United Kingdom and France) and adversaries (the Soviet Union and China) that went through a similar stage of nuclear force modernization. But coping with the nuclear maturation of nations with which Washington has neither a formal alliance nor any real adversity is a novel undertaking for which the U.S. government does not yet have a coherent, long-term policy.³ Should the United States try to help, hinder, or not involve itself with the modernization and expansion of nuclear deterrent arsenals in South Asia? This article examines the current policy challenges for the United States in dealing with the India-Pakistan nuclear rivalry.

An effective policy response to the new strategic situation in South Asia must accomplish at least four objectives. First, it must be based on a realistic assessment of the ground realities in the region—not on wishful thinking that the nuclear genie can be put back in the bottle. Like it or not, India and Pakistan are racing to enhance the size, sophistication, and operational readiness of their nuclear strike arsenals. The nuclear problem in South Asia is today qualitatively different than it was prior to the Indian and Pakistani nuclear tests and declarations of May 1998.

Second, although Washington's ability to influence the strategic conduct of India and Pakistan is quite limited, even limited influence is possible only if U.S. policymakers correctly understand the political and military logic underpinning Indian and Pakistani force decisions. Each side believes that, at a minimum, it needs a secure, second-strike nuclear capability—a posture that should be familiar to America because this same capability has long been a requirement of U.S. nuclear policy. Although in practice the United States and the Soviet Union amassed nuclear arsenals far in excess of the types and numbers of forces needed to achieve second-strike stability, the strategic logic of deterrence is as applicable

now for Islamabad and New Delhi as it ever was for the superpowers during the Cold War—and arguably much more important because a nuclear arms race would be far more risky and costly for India and Pakistan because of their relatively fragile economies, political systems, and nation-states.

Third, the primary regional goal of the United States should be to reduce the risk of nuclear war in South Asia. Washington has other important regional objectives—such as combating terrorism, promoting democracy, and creating economic growth. However, none of these can be achieved if India and Pakistan conduct a nuclear war. And the risk of their doing so is much higher than most policymakers and analysts recognize.

Fourth, U.S. policymakers should try to ensure that whatever they do to improve strategic stability in South Asia does not increase the motivation or capability of other countries to develop nuclear weapons. India and Pakistan do not fit neatly into the nuclear nonproliferation regime. Even though neither of them signed the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), that document—and thus the overall regime—still recognize them as non-nuclear weapon states because they did not manufacture and test nuclear explosive devices prior to January 1967.⁴ Therefore, special efforts must be made to bring India and Pakistan into the regime as nuclear weapon states, even though they can never have this status in terms of the NPT. (For that matter, Israel also should be treated like India and Pakistan, because it too never signed the treaty. Because Iran and North Korea did accede to the NPT as non-nuclear weapon states, however, they should be forced to honor their treaty commitments—even though North Korea subsequently withdrew from the NPT.) Should it prove impossible to reduce the danger of an Indo-Pak nuclear war without causing some damage to the regime, I suggest that averting an India-Pakistan war should be a higher priority than avoiding minor injury to the regime, in part because a nuclear war would be far more harmful to the regime in the long term.

THE DEMANDS OF DETERRENCE

Deterrence is a demanding strategy. One country deters another by convincing it that the expected value of a certain action is outweighed by the expected punishment. Deterrence can fail if the challenger doubts either the cost of the punishment or the likelihood that it will be inflicted. When the concerned countries are both armed

with nuclear weapons, there generally is little doubt about the cost of punishment: The destruction nuclear warfare can cause is clear to all. However, for new nuclear-armed states, such as India and Pakistan, one side might reasonably question whether the other has deployed enough well-designed, well-built, and well-maintained nuclear weapons to inflict sufficient punishment on the other side. Or it might believe that its adversary's nuclear arsenal is vulnerable—because it is either very small or not well hidden or protected—and calculate that a preventive or preemptive military strike could succeed. For India and Pakistan, therefore, size does matter. The condition of mutually assured destruction probably requires that each side be capable of launching a devastating nuclear second strike, even if the other side strikes first with nuclear weapons.

Were India and Pakistan able to deploy a sufficient number of survivable nuclear weapon systems, and should they convince each other of this situation, another challenge remains to be overcome to effect real deterrence. When the threatened punishment can damage the defender almost as much as the challenger, as is the case when each possesses a sufficiently large arsenal of nuclear weapons, the challenger has good reason to doubt the resolve of the defender to carry out the threat: It could be suicidal. Under these circumstances, a stalemate could be the most likely outcome. In other words, mutual deterrence might not be an automatic condition produced by each side's possession of usable and survivable nuclear weapons.

This is a contentious point. Because “a nation will be deterred from attacking even if it believes that there is only a possibility that the adversary will retaliate,” Kenneth Waltz argues that “the probability of major war among states having nuclear weapons approaches zero.”⁵ Even assuming that nuclear deterrence is nearly automatic, the evidence shows that India and Pakistan, just like the United States and the Soviet Union before them, have acted as if deterrence is a very challenging outcome. Each of these countries has labored over the other main requirement of deterrence policy, which lies in one side convincing the adversary that the threatened response is credible—even if this leads to its own destruction. A country that is willing to maintain an assertive posture in the face of the nuclear danger, thereby raising the risk of a crisis spiraling out of control, is thus often rewarded. The employment of what Thomas Schelling described as “threats that leave something to chance” can enhance the credibility of coercive or deterrent policies.⁶

However, this assertive approach to deterrence can produce another kind of problem. It can increase tensions

so much that war is made more likely. This is the concern that preoccupied Bernard Brodie in 1959 and led him to counsel:

Deterrence...depends on a subjective feeling which we are trying to create in the opponent's mind, a feeling compounded of respect and fear, and we have to ask ourselves whether it is not possible to overshoot the mark. It is possible to make him fear us too much, especially if what we make him fear is our over-readiness to react, whether or not he translates it into clear evidence of our aggressive intent. The effective operation of deterrence over the long term requires that the other party be willing to live with our possession of the capability upon which it rests.⁷

In other words, fielding nuclear weapons and ballistic missiles, and making bold deterrent threats ultimately might be the easiest prerequisites for deterrence. Far more challenging, but no less critical, are steps designed to make each competitor feel confident that the other accepts its right to exist. Otherwise, competitors could have a hard time distinguishing assertive, defensive preparations for retaliation from aggressive preparations for attack. Here, arms control can help.⁸

Although India and Pakistan have possessed nuclear weapons capabilities for nearly two decades, they managed to avoid dealing with the full implications of nuclear deterrence—largely because of the intense nonproliferation pressures generated by the United States and other concerned countries. Even after their May 1998 nuclear explosive tests, Indian and Pakistan were slow to fashion their newly validated nuclear weapon capabilities into operational deterrence postures—again partly because of international nonproliferation demands. However, two post-1998 military conflicts forced the adversaries to reassess their strategic force requirements.

The first conflict took place in the summer of 1999 when Indian and Pakistani troops clashed on the mountain heights near the Indian village of Kargil. Even though the fighting was confined to a relatively small section of terrain in Indian-held Kashmir, each side was forced to think through the implications of a larger war. Still more serious was the military standoff of 2002. After terrorists attacked the Indian parliament in December 2001, India fully mobilized its armed forces for war. For nine months, more than one million Indian and Pakistani soldiers girded for battle along their 1,800-mile border. Foreign and domestic pressures eventually induced India to withdraw its forces, and the crisis subsided—but not before each side undertook unprecedented preparations for the possi-

bility that a conventional war might escalate into a nuclear exchange. Because the Kargil conflict of 1999 and the composite crisis of 2001-2002 each risked escalation to full-scale conventional war, and thus possibly to nuclear war, New Delhi and Islamabad are now devoting considerable attention to the long-neglected issues of strategic force structure, targeting policy, positive and negative command-and-control arrangements, declaratory nuclear doctrine, and strategic signaling to communicate the credibility of deterrent threats during times of peace, crisis, and possibly war.

Through the steps that India and Pakistan recently have taken to expand their nuclear strike systems and to signal the credibility of their deterrent threats, both countries are now behaving largely as strategic theory would predict. But the United States and other world actors have been slow to embrace this behavior because they believe it carries a high risk of military escalation and exacerbates the animosity and mistrust that have existed between India and Pakistan for 55 years. U.S. officials thus face a real conundrum. Should they base their policies toward South Asia on the logic of nonproliferation or on the same strategic logic that governed U.S. nuclear deterrence policies from 1945 to the present? Or should they try to blaze some new “third way” on this issue? Should Washington try to hinder the development of Indian and Pakistani nuclear weapon and missile programs—as it does with Iran and North Korea—or should it help these programs—as it did with the United Kingdom and, to a lesser extent, France? In other words, should U.S. policymakers engage Indian and Pakistani defense planners in serious dialogue on strategic stability or leave them to their own devices?

SECURE NUCLEAR STRIKE ARSENALS

The maintenance of a secure second-strike nuclear arsenal is an unquestioned priority for the United States and other first-generation nuclear powers; but curiously Washington does not condone this practice for India or Pakistan. Even after each of these countries conducted several nuclear explosive tests and declared themselves nuclear weapon states in May 1998, the United States still acted largely according to the logic of nonproliferation and the legal requirements of the NPT—even though neither Islamabad nor New Delhi had acceded to this treaty. President William Clinton's point person on South Asia after the tests, Deputy Secretary of State Strobe Talbott, affirmed this in a November 1998 speech: “Unless and until they disavow nuclear weapons and accept safeguards on all

their nuclear activities they will continue to forfeit the full recognition and benefits that accrue to members in good standing of the NPT. This is a crucial and immutable guideline for our policy."⁹ However, Talbott understood that it would be a very long time, even under the best of circumstances, before India and Pakistan would accede to the NPT as non-nuclear weapons states. Thus he pressed the nascent nuclear nations to move into rapid compliance with five practical benchmarks: (1) ratify the Comprehensive Test Ban Treaty (CTBT), (2) halt all production of fissile material, (3) limit the development and deployment of missiles and nuclear-capable aircraft, (4) tighten export controls on sensitive nuclear materials and technologies, and (5) renew the bilateral dialogue aimed at solving long-standing disputes.

At first, Indian and Pakistani leaders responded positively to U.S. diplomacy. They committed to strengthening their nuclear export controls, held a landmark bilateral summit in Lahore, Pakistan, in February 1999, and came close to signing the CTBT (with ratification left to the future). In the end, however, the Lahore process broke down when Indian and Pakistani forces clashed after the latter secretly occupied several dozen mountain posts inside Indian-controlled Kashmir near the town of Kargil. The New Delhi and Islamabad governments refused to sign the CTBT after the U.S. Senate failed to ratify the treaty. And even Pakistan's much-touted export control reforms have come under fire over allegations that Pakistani scientists have helped North Korea and possibly even Iran and other countries with centrifuge technology for the production of bomb-grade uranium.¹⁰ As far as the other two benchmarks are concerned, Indian and Pakistani defense planners never gave much thought to curbing the production of fissile material or slowing the development of diverse delivery systems.

India and Pakistan each possess stockpiles of nuclear weapon components and could assemble and deploy a few nuclear weapons within a few days to a week.¹¹ Although the New Delhi and Islamabad governments refuse to reveal information about the size, composition, and operational status of their nuclear arsenals, a rough estimate can be calculated from publicly available information. Indian scientists probably are able to separate between 25 and 40 kilograms (kg) worth of bomb-grade plutonium annually from the spent fuel produced at the Cirus and Dhruva reactors, located at the Bhabha Atomic Research Center (BARC) near Mumbai. Therefore, India could accumulate a stockpile of between 300 kg and 640 kg of bomb-grade plutonium by December 2003.¹² India also

has a program to produce highly enriched uranium (HEU); however, the small amount of material produced to date probably has not gone into the nuclear weapons program but is likely being stored to fuel the reactor India is developing for its planned nuclear submarine, the Advanced Technology Vehicle.¹³ Assuming that Indian scientists require 5 to 7 kg of plutonium to manufacture one warhead,¹⁴ India probably can produce between 4 and 8 nuclear weapons each year, and thus could possess enough fissile material for between 40 and 130 weapons, with 80 weapons as the median estimate.

Unlike India, which relies on plutonium for its weapons, Pakistan's nuclear program has been based on highly enriched uranium. Assuming that Pakistan's Kahuta enrichment plant is able to produce between 80 kg and 140 kg of weapons-grade uranium per year, Pakistan today could have between 900 kg and 1,370 kg of HEU available for weapons production. (The amount of HEU required for a bomb is believed to range between 12 kg and 25 kg, depending on the weapon design.) In addition, in 1998 Pakistan commissioned an unsafeguarded heavy water research reactor at Khushab, which is capable of yielding enough plutonium to make a few nuclear weapons annually. Combining these possible plutonium and HEU inventories, Pakistan could possess enough fissile material to fabricate between 37 and 100 weapons, with 65 as the median estimate.¹⁵ These estimates of possible Indian and Pakistani fissile material stockpiles and nuclear weapon capabilities are summarized in Table 1.

India and Pakistan each possess a wide variety of aircraft and ballistic missiles that are, at least theoretically capable of delivering nuclear weapons to their targets. In 2001, the U.S. Defense Department assessed that India would most likely employ fighter-bomber aircraft to carry nuclear weapons because its ballistic missiles probably were not yet ready for this role.¹⁶ The Indian Air Force operates several aircraft that could be employed for this mission, but the best suited would be the Jaguar, Mirage-2000, MiG-27, or Su-30 aircraft. India has deployed short-range Prithvi 1 missiles that are capable of carrying a 1,000 kg warhead (the presumed maximum size of a nuclear device), but because of Prithvi's restricted range, India most likely will turn to its new solid-propellant Agni 1 missile, which has a 700–900-kilometer (-km) range, or its 2,000–3,000-km-range Agni 2 missile, as its preferred nuclear platforms as soon as they become operational.

The Pakistan Air Force flies two kinds of aircraft probably capable of nuclear weapons delivery: the U.S.-

TABLE 1
INDIAN AND PAKISTANI FISSILE MATERIAL STOCKPILES AND NUCLEAR WEAPON CAPABILITIES

| | Weapons-Grade Plutonium (kg) | | | Weapons-Grade Uranium (kg) | | | Weapon Capability | | |
|----------|------------------------------|--------|------|----------------------------|---------|---------|-------------------|--------|------|
| | Low | Medium | High | Low | Medium | High | Low | Medium | High |
| India | 300 | 430 | 640 | Unknown | Unknown | Unknown | 40 | 80 | 130 |
| Pakistan | 10 | 25 | 60 | 900 | 1120 | 1370 | 37 | 65 | 100 |

supplied F-16 and the French Mirage 5 jets. After the United States suspended F-16 sales to Pakistan in 1990, however, Islamabad placed a high priority on acquiring ballistic missiles to offset India's conventional military advantages and to ensure reliable delivery of nuclear weapons. Liquid-fuel Ghauri missiles, developed with North Korean assistance, and solid-fuel Shaheen 1 & 2 missiles, developed with Chinese assistance, probably would be employed to deliver Pakistan's nuclear weapons. The possible delivery systems in operation or under development for India and Pakistan are described in Table 2.

Based on these force estimates, it would appear that India and Pakistan each have secured an adequate stockpile of nuclear weapons and delivery systems to make the other side abandon any notion of preventive or preemptive attack. Nevertheless, Indian Finance Minister Jaswant Singh proclaimed in September 2002 that every country has the right to preemption and that "pre-emption or prevention is inherent in deterrence."¹⁷ Singh was trying to warn Pakistan of the grave consequences it could face if it did not cease its alleged support for the infiltration of terrorists into Indian-held Kashmir and other parts of Indian territory. He also was trying to send a signal to Washington by justifying possible military action against Pervez Musharraf's Pakistan in the same terms that the Bush administration used to justify its 2003 preventive war against Saddam Hussein's Iraq.

Despite the tough talk, it is difficult to imagine that Indian Prime Minister Atal Bihari Vajpayee or any future Indian leader would be bold or desperate enough to order Indian armed forces to mount a major preventive war against Pakistan's nuclear stockpile. The numbers of Pakistan's nuclear weapons and delivery platforms are not large by the standards of first-generation nuclear powers (even after their post-Cold War force cuts), but they almost certainly are sufficiently numerous and difficult to detect or destroy for Indian war planners to have any confidence in a disarming first strike. Because of India's

presumably larger weapons stockpile, more numerous delivery options, and greater geographical depth, the same constraint definitely applies to Pakistan's generals.

It should not be forgotten that the strategic competition between India and Pakistan is very dynamic. If either India or Pakistan were able to make substantial improvements in its intelligence, targeting, and precision-strike mission areas—as well as in the realm of air and missile defense—then its military planners might feel more confident in their ability to launch a disarming first strike. But these are big "ifs." Domestic resource constraints and some remaining international export restrictions make a military-technological breakthrough unlikely in South Asia at least for the next decade. Even if the wealthier and more technologically advanced party, India, were to make a giant leap forward in one or two of the relevant military mission areas, remaining limitations in the other areas probably would still require caution in strategic policymaking. When it comes to the delicate business of launching preventive strikes against a fairly large, well-concealed, and well-protected nuclear arsenal, perfection would seem to be a mandatory precondition for action. Recall that President John F. Kennedy abandoned the idea of launching military attacks against the Soviet missile inventory in Cuba when his military advisor reported that he could not guarantee 100 percent success.

Some modest number of survivable nuclear weapons therefore would seem to be a prerequisite for strategic stability in modern-day South Asia, but specifying exactly what this number is proves to be a very difficult task. As in the case of the United States-Russia rivalry, where the lowest nuclear stockpile needed for deterrence always has been—and remains—a deeply controversial matter, India and Pakistan are hard pressed to quantify their own minimum deterrence requirements. The problem is that the size of the nuclear arsenal must be large enough not only to deter the adversary, but also to make powerful domestic constituencies confident in their own

TABLE 2
POTENTIAL INDIAN AND PAKISTANI NUCLEAR DELIVERY SYSTEMS

| India | Aircraft | Range (hi-lo-hi) | Source | Status |
|-----------------|-----------------------|-----------------------------|------------------|---|
| | Mirage-2000H | 1,205 km | France | 2 squadrons, 35 planes in service |
| | Su-30 MKI | 3000 km | Russia | 50 planes purchased, 18 in service |
| | Jaguar S(I) | 850 km | UK/France | 4 squadrons, 88 planes in service |
| | MiG-27 ML | 500 km | Russia | 214 planes in service |
| | Missiles | Range | Source | Status |
| | Prithvi 1 (SS-150) | 150 km | Indigenous | Army version, in service |
| | Prithvi 2 (SS-250) | 250 km | Indigenous | Air Force version, tested, in development |
| | Prithvi 3 (Danush) | 350 km | Indigenous | Navy version, failed test in 2000, in development |
| | Agni 1 | 700 - 900 km | Indigenous | Tested on 25 January 2002, in production |
| | Agni 2 | 2,000- 3,000 km | Indigenous | Tested in 1999 and 2001, in development |
| | Agni 3 | 3,500- 4,000 km | Indigenous | In development |
| Pakistan | Aircraft | Range (hi-lo-hi) | Source | Status |
| | F-16 A/B | 925 km | United States | 32 planes in service |
| | Mirage 5 PA | 1,300 km | France | 50 planes in service |
| | Missiles | Range | Source | Status |
| | Hatf 1 | 80 km | Indigenous | In service since mid-1990s |
| | Hatf 2 (Abdali) | 180 km | Indigenous/China | Tested May 2002, in production |
| | Hatf 3 (Ghaznavi) | 290 km | Indigenous/China | Based on M-11, tested October 2003, in service |
| | Hatf 4 (Shaheen 1) | 600 km | Indigenous/China | Based on M-9, tested October 2003, in service |
| | Hatf 5 (Ghauri) | 1,500 km | Indigenous/DPRK | Based on No Dong, tested in May 2002, in service |
| | Hatf 6 (Shaheen 2) | 2,000- 2,500 km | Indigenous/China | Based on M-9, not yet tested, in development |

Source: *Jane's Sentient Security Assessment—South Asia*; *Jane's All the World's Aircraft*, *Jane's Strategic Weapon Systems*, and various media reports.

country's security (and their own organization's rightful share of national security resources). Arguably, this internal factor was one of the main causes of the superpower arms race. Unless this issue can be addressed head-on, domestic politics and organizational rivalries also will propel India and Pakistan to build many more weapons (and deploy them in more threatening configurations) than minimum deterrence would seem to demand.

Engaging India and Pakistan in frank discussions about the specific force requirements for minimum deterrence would seem to be a prudent course of action for the U.S. government. But curiously George W. Bush, just like his predecessor, William Clinton, has refused to embrace this as a policy objective. Rather, Washington still discourages India and Pakistan from developing reliable second-strike capabilities. John S. Wolf, Assistant Secretary of State for Nonproliferation in the Bush administration, explained the persistence of nonproliferation logic for South Asia in an April 2002 speech: "We hope that confidence-building measures like keeping weapons and delivery systems separated, halting fissile material production, and restraining nuclear and missile programs can be implemented."¹⁸ It is possible that the Bush administration wishes to freeze Indian and Pakistani strategic programs where they presently are, not because of concerns about strategic stability, but to reduce the number of fissile materials, warheads, and missiles that could fall into the wrong hands. In this respect, Wolf indicated: "Tightened export controls are also vital to ensure that India and Pakistan do not become a source for sensitive materials and technology."¹⁹

If India and Pakistan enlarge their nuclear arsenals in the name of deterrence, the question might arise as to which is a bigger risk to international security: a nuclear war in South Asia or the loss of control over a larger and more sophisticated nuclear arsenal? Fortunately, herein lies one of the few bits of good news. A bigger and better nuclear arsenal does not necessarily translate into a harder arsenal to control. Enhanced deterrence can go hand in hand with tighter control and the reduced risk of theft. However, if one side believed that the risk of an attack on its vulnerable arsenal were high, it would feel compelled to redeploy its forces to new defensive positions; and whenever nuclear weapons are deployed out of their safe garrisons, the risk of loss of control increases.

Ensuring tight, centralized control of Indian and Pakistani nuclear weapons is an important U.S. policy concern, especially in an era when terrorists seeking weapons of mass destruction have been known to operate in and around South Asia. Not only is this objective compatible

with strategic stability, it provides an even more urgent reason for Washington to engage in serious strategic dialogues with Islamabad and New Delhi: to reduce the likelihood that one side or the other would be driven to reckless force deployments, which would significantly raise the risk of nuclear theft or loss of control.

THE CREDIBILITY PROBLEM

When it comes to deterring direct nuclear attack against the core territory of either India or Pakistan, there is little problem of credibility. Neither side is foolish enough to doubt that such an attack would be met with a swift and devastating nuclear counterattack. The real credibility problem arises with respect to deterring limited military challenges, whether in the form of frequent, small-scale military intrusions across the Kashmir Line of Control (LOC; as occurred in Siachen in 1984 and Kargil in 1999²⁰), Pakistan's support for the insurgency in Kashmir, or India's pursuit of limited military options to curtail this support. As Indian defense analyst Raja Menon put it, the Kargil conflict in particular, "demonstrated that the Subcontinental nuclear threshold probably lies territorially in the heartland of both countries, and not on the Kashmir cease-fire line."²¹ This is why India immediately mobilized for war after terrorists attacked the parliament building in New Delhi in 2001, but were relatively restrained when Pakistani forces infiltrated into the Kargil heights in Indian-held Kashmir in 1999. How then do India and Pakistan credibly signal their preparedness to respond to limited military challenges at the conventional or subconventional (guerilla) levels with punishing force?

In the past few years, Indian and Pakistani officials have resorted to various kinds of signals to communicate their resolve to respond to limited military challenges. These signals also have been designed to convey their interest in keeping conflict limited, and sometimes to communicate their interest in resolving the crisis. In some cases, Indian or Pakistani leaders intend to convey only one message to one audience, usually to the other side's leadership. In other cases, signals are intended to reach multiple audiences, such as the domestic population, the U.S. government, and other third parties. In other circumstances, multiple messages are intended, sometimes to multiple audiences. These signaling efforts can be divided into two categories: direct communication and tacit communication.

Direct communication has included: (1) private statements made either through formal government channels, such as embassies, or through back-channel communica-

tions among government-appointed representatives; (2) private statements made to third parties, such as the U.S. government; and (3) public statements made by civilian and military officials. For various reasons, direct communication is often incomplete, sometimes extremely difficult, and at other times not desirable. Under any of these circumstances, the Indian and Pakistani governments have resorted to tacit bargaining (or tacit communication). The three most prominent types have included force deployments, missile tests, and military firing across the Kashmir LOC. At times of crisis, tacit bargaining might be even more reliable than direct communication because the signals would be taken much more seriously.

Tacit communication through risky military conduct has become commonplace in South Asia. While sometimes disturbing to the populations of India and Pakistan and usually always distressing to the international community, this behavior is a logical response to the strategic predicament in which India and Pakistan now find themselves. The presence of nuclear weapons has not altered the desire of India and Pakistan to “win” crises, but it has strengthened their interest in avoiding war. This condition creates a paradox. India and Pakistan would appear to have every incentive to exhibit prudence during a crisis and avoid potentially catastrophic escalation, but at the same time, to reinforce their reputations for resolve, they have powerful new incentives to run risks and to stand firm in the face of the other side’s risky behavior. Faced with similar circumstances during the Cold War, the United States and the Soviet Union raised their “provocation threshold” (that is, the level at which provocative political or military moves might provoke a military response) and devised creative, new options to exercise coercion short of war. The same pattern is now apparent in South Asia, with border shelling, cross-border intrusions, and costly force deployments now almost everyday occurrences.

U.S. government officials believe that these costly, reputation-enhancing signals are reckless. Indeed they probably are. But they also are driven by the logic of the strategic situation. American policymakers who cannot understand why Indian and Pakistani leaders run such dangerous risks suffer from selective memory loss, for the United States and the Soviet Union turned similar risk-taking into a well-rehearsed form of art early in the Cold War. Whereas Washington and Moscow learned to temper their strategic competition after the Cuban missile crisis, New Delhi and Islamabad do not appear to have undergone a parallel nuclear learning process—even though the 2001-2002 composite military crisis might

have been regarded as their “Cuban crisis.” As a result, American exhortations to “reduce nuclear risks” are likely to ring hollow to the Indians and Pakistanis who recall U.S. and Soviet strategic conduct during the Cold War.²²

Moreover, in many respects both Indian and Pakistani policymakers believe that their strategies of brinkmanship worked well during the 1999 Kargil conflict and the 2001-2002 composite military crisis. Indians believe that the application of intense force against the intruders in the Kargil heights, coupled with credible threats to widen the conflict if necessary, compelled Pakistan to withdraw its remaining forces. Many Pakistanis feel that while they agreed under heavy U.S. pressure to vacate their well-defended mountain positions, they deterred India from expanding the conflict by signaling their willingness to respond to Indian escalation with conventional, and possibly nuclear, counterattacks.

As noted above, after terrorists attacked India’s parliament building in December 2001, Indian Prime Minister Atal Bihari Vajpayee ordered the full mobilization of Indian armed forces and told them to prepare for a major attack against Pakistan, which Indian intelligence services assessed was behind this and other terrorist attacks on Indian soil. The Pakistanis claimed that they again “deterred” Indian plans to attack in the early winter and summer of 2002.²³ This interpretation gained even more credibility in light of President Musharraf’s statement on December 30, 2002, that war with India was averted because of his repeated warnings that should Indian forces cross the border, Pakistan’s response would not be confined to conventional warfare. Although President Musharraf did not specifically mention the threat of nuclear weapons in his speech to an army corps reunion in Karachi, he did state that he was prepared to take severe military measures at the height of the 2002 crisis: “In my meetings with various world leaders, I conveyed my personal message to Indian Prime Minister Vajpayee that the moment Indian forces cross the Line of Control and the international border, then they should not expect a conventional war from Pakistan.” Musharraf added, “I believe my message was effectively conveyed to Mr. Vajpayee.”²⁴ Despite the fact that war was only narrowly averted in 2002, Pakistani military planners now appear to have even more confidence in their ability to manage the risks of conventional-nuclear deterrence. Similarly, Indian officials believe that their major military mobilization coerced Musharraf into at least temporarily abandoning his support of “cross-border terrorism” and made the United States more sensitive to the issue of terrorism in Kashmir and elsewhere on Indian territory.

Because major war was avoided in South Asia's recent crises, and because officials in New Delhi as well as in Islamabad "learned" that their strategy of brinkmanship paid off, it is likely that during the next crisis each side will resort to new forms of risky military behavior to signal their reputations for resolve, to score limited gains, and, hopefully, to avert a nuclear war. Although the Indian and Pakistani governments will go to great lengths to keep the United States at arm's length from their strategic planning processes, lest Washington try to apply unwanted pressure,²⁵ U.S. officials can and should try to play a constructive role in Indian and Pakistani efforts to bring their political and military conduct in line with the imperatives of nuclear ownership. We are all fortunate that a major war did not break out in 1999 or 2002, but U.S. policymakers would be prudent to help India and Pakistan head off the next serious military crisis lest it trigger the war that nobody wants.

AN UNUSUAL OPPORTUNITY FOR U.S. POLICY

The United States has an unusual opportunity to influence strategic events in the region. Washington has long tried to maintain good relations with India and Pakistan, but because of the intense competition between these two rivals, which began with their independence from British dominion in August 1947, the United States has never been able to maintain close relations with both countries simultaneously. When U.S. security relations were good with Pakistan, relations with India were bad. This was true for much of the Cold War when India pursued a policy of nonalignment and leaned toward the Soviet Union, while Pakistan could be counted on as a staunch ally in the struggle against communism. When the United States moved closer to India after the Sino-Indian war of 1962 and again in the 1990s after the breakup of the Soviet Union, U.S. security ties with Pakistan suffered. What is unique about the current period is that the United States has exceptionally good bilateral relations with both India and Pakistan.²⁶ For the first time in history, Washington conducts regular bilateral "strategic dialogues" with both India and Pakistan. The challenge, therefore, is for Washington to translate the increased leverage it enjoys with the governments in New Delhi and Islamabad into tangible progress in stabilizing and restraining their strategic competition.

The logic of nonproliferation no longer applies to the India-Pakistan rivalry. The international community still can play a very important role in helping India and Pakistan make steady improvement in their nuclear and missile

export control policies and procedures, but constructive measures intended to help New Delhi and Islamabad lower the risk of war, especially a nuclear war, require a different logic—actually the familiar strategic logic that has governed U.S. nuclear policy from 1945 to the present.²⁷ Such an approach would mark a major departure in thinking about new nuclear states. It would require more than psychological change. The U.S. foreign policy bureaucracy, which tends to devise technical solutions to technical problems, now must develop a strategic solution to a new strategic predicament in South Asia. Toward this end, U.S. policymakers might wish to consider the following courses of action for reducing the nuclear danger in South Asia:

- Continue the bilateral strategic dialogues that began with Strobe Talbott's discussions after the May 1998 nuclear tests and were resumed by the Bush administration. However, such dialogues should not simply be seen as a forum for U.S. officials to preach nuclear and missile nonproliferation. Rather, the goal should be to gain a greater mutual understanding of the perceived requirements of deterrence stability and strategic restraint, and to help India and Pakistan build greater stability and restraint into their strategic competition.
- Accept Indian and Pakistani compulsions for the development of a relatively small number of survivable, second-strike nuclear forces—at least in private, if not in formal policy pronouncements. There are two critical challenges here. First, for reasons outlined above, India and Pakistan might not be content with minimum deterrent capabilities. Many of the same forces that drove the United States and the Soviet Union to stockpile numbers and kinds of nuclear weapons well in excess of any plausible strategic need probably also will operate in South Asia. Second, India faces a strategic competition with China as well as Pakistan; thus New Delhi might feel compelled to build an arsenal to match that country even though it could far exceed the requirements for deterring Pakistan. The point is that if the United States does not immediately engage India and Pakistan in serious deliberations about the requirements of minimum deterrence, the opportunity could soon be lost.
- Encourage India and Pakistan to see arms control as a vital element of national security, much as the United States and the Soviet Union did after the 1962 Cuban missile crisis. Previous nonproliferation measures disguised as arms control—such as the CTBT and the Fissile Material Cutoff Treaty (FMCT)—might be

useful starting points, but meaningful arms control in South Asia probably has to be initiated from inside the region, not imposed from the outside. This is why it makes sense for the United States to discuss the process of arms control and the linkage between arms control and national security, rather than proposing specific arms control initiatives for India and Pakistan.

- Examine options for bringing India and Pakistan into the nuclear nonproliferation regime as nuclear weapon states.²⁸ Because the NPT does not permit the recognition of additional nuclear weapon states beyond the first five (the United States, Russia, Britain, France, and China), this will not be an easy process, but the costs to the regime of continuing to ignore the reality of a nuclear South Asia are likely to climb in the future.
- Continue to emphasize the importance of stringent nuclear and missile export controls and continue to apply tough sanctions for noncompliance with international export standards. Critics contend that the Bush administration is not doing enough to crack down on Pakistan over recent allegations that it provided nuclear assistance to North Korea, Iran, and possibly other countries. Because no reliable evidence has been provided to prove these allegations, however, one should take the U.S. government at its word that it is closely monitoring the situation and will act swiftly and decisively if reliable evidence of reckless nuclear exports does surface.
- Share information on “best practices” for ensuring the safety and security of nuclear weapons—especially, but not only, during storage, transportation, and possibly deployment to operational positions. However, such information sharing should not take place by itself. It should be tied to meaningful bilateral (and possibly multilateral) dialogues about the requirements of effective nuclear deterrence, for best practices are only “best” if they satisfy military as well as political needs.
- Prepare the ground in peacetime for active crisis management diplomacy the next time India and Pakistan prepare for war. The United States played a crucial role in helping India and Pakistan to manage the military crises of 1999 and 2001–2002. U.S. policymakers should anticipate the more demanding requirements of doing this the next time. In addition, Washington should begin planning now for assertive diplomatic actions to discourage nuclear escalation should India and Pakistan find themselves at war for the fourth time in their history.

- Discuss with Indian and Pakistani government officials concrete steps that could be taken to work out solutions to their bilateral disputes, especially regarding the political status of Kashmir. Arguably, this is the most important task; but it also is the hardest. The point is that, while a meaningful peace process is long overdue, measures to improve strategic stability should not be held hostage to what would surely be a long and painful process.

¹ I would like to thank Feroz Hassan Khan, Surinder Rana, Christopher Cleary, and two anonymous reviewers for their helpful comments on this article. The author alone is responsible for the information and views contained in this article. They do not represent the positions of the Naval Postgraduate School or the U.S. Department of Defense.

² U.S. Department of State and U.S. Agency for International Development, Security, Democracy, Prosperity: Strategic Plan, Fiscal Years 2004–2009, August 2003, available at <<http://www.state.gov/m/rm/rls/dosstrat/2004>>.

³ One could say that the United States confronted a similar predicament in dealing with Israel's nuclear program in the 1960s and 1970s. However, Washington was then much closer to Israel than it ever was to India and Pakistan. And although the United States initially tried to stop the Israeli program, the nuclear issue ultimately was dealt with privately in the context of the U.S.–Israeli security relationship. For background, see Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998).

⁴ The distinction between nuclear weapon states and non-nuclear weapon states is specified in Article 9 of the NPT. The full text of the treaty is available at <<http://www.state.gov/t/np/trty/16281.htm>>.

⁵ Kenneth N. Waltz, “The Origins of War in Neorealist Theory,” in Robert I. Rotberg and Theodore K. Rabb, eds., *The Origin and Prevention of Major Wars* (Cambridge: Cambridge University Press, 1988), pp. 50–51. Scott Sagan and Waltz debate this and related points in Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate Renewed* (New York: W. W. Norton, 1995, 2003).

⁶ Thomas Schelling, *The Strategy of Conflict* (Cambridge, Mass.: Harvard University Press, 1960), p. 187.

⁷ Bernard Brodie, *Strategy in the Missile Age* (Princeton, N.J.: Princeton University Press, 1959, 1965), p. 397.

⁸ Peter R. Lavoy, “Regional Perspectives on Arms Control: South Asia,” in *Arms Control: Cooperative Security in a Changing Environment*, Jeffrey A. Larsen, ed. (Boulder: Lynne Rienner, 2002), pp. 241–52.

⁹ Strobe Talbot, “India–Pakistan: The Next Critical Steps,” speech delivered on November 12, 1998, at the Brookings Institution, Washington, D.C., <<http://www.brook.edu/comm/transcripts/19981112a.htm>>.

¹⁰ See Anupam Srivastava and Seema Gahlaut, “Curbing Proliferation from Emerging Suppliers: Export Controls in India and Pakistan,” *Arms Control Today* 33 (September 2003); and Guarav Kampani, “Second Tier Proliferation: The Case of Pakistan and North Korea,” *Nonproliferation Review* 9 (Fall–Winter 2002).

¹¹ U.S. Department of Defense (DOD), *Proliferation: Threat and Response* (Washington, D.C.: U.S. Government Printing Office, January 2001), pp. 21–30.

¹² This estimate is calculated by taking the low, medium, and high figures contained in David Albright, *India and Pakistan's Fissile Material and Nuclear Weapons Inventory, End of 1999* (October 11, 2000), available at <<http://www.isis-online.org>>, and adding 75–120 kilograms of plutonium to update the estimate to the end of 2003. See also Ashley Tellis, *India's Emerging Nuclear Posture: Between Recessed Deterrent and Ready Arsenal* (Santa Monica: RAND, 2001), pp. 484–98; and Rodney W. Jones, *Minimum Nuclear Deterrence Postures in South Asia: An Overview*, report prepared for the Defense Threat Reduction Agency Advanced Systems and Concepts Office, October 1, 2001, pp. 45–9.

¹³ “ATV,” Jane's Underwater Warfare Systems, September 5, 2003.

¹⁴ Tellis, *India's Emerging Nuclear Posture*, pp. 484–98.

¹⁵ This estimate is also based on the calculations made by Albright, *India and Pakistan's Fissile Material and Nuclear Weapons Inventory*.

¹⁶ DOD, *Proliferation: Threat and Response*, p. 23.

¹⁷ Sridhar Krishnaswami, "Every Country Has the Right to Pre-emption: Jaswant," *Hindu*, September 30, 2002, <<http://www.hinduonnet.com/2002/10/01/stories/2002100103650100.htm>>.

¹⁸ John S. Wolf, "Remarks to the 12th Annual International Arms Control Conference," Sandia National Laboratories, Albuquerque, New Mexico, April 19, 2002, <<http://www.state.gov/t/np/rls/rm/9635.htm>>.

¹⁹ Ibid.

²⁰ In 1984 Indian troops seized and held the disputed Siachen glacier, which sits high atop the Karakoram mountain range at altitudes ranging from 18,000 to 20,000 feet. Since then Pakistani and Indian troops have waged an ongoing high-altitude war for control over this intrinsically unimportant piece of land. South Asian strategic analyst Stephen P. Cohen has likened the Siachen conflict to two bald men fighting over a comb. For background on the conflict, see V. R. Raghavan, *Siachen: Conflict without End* (New Delhi: Viking, 2002).

²¹ Raja Menon, *A Nuclear Strategy for India* (New Delhi: Sage, 2000), p. 116.

²² The policy objective of reducing nuclear risks is identified in U.S. Department of State and U.S. Agency for International Development, *Security, Democracy, Prosperity: Strategic Plan, Fiscal Years 2004–2009*.

²³ For example, see "Are Pakistani Nukes More Effective Than Indian?" *Daily Times (Lahore)*, <http://www.dailytimes.com.pk/print.asp?page=story_13-12-2002_pg1_11>.

²⁴ "India Was Warned of Unconventional War," *News International*, December 31, 2002, <<http://www.jang.com.pk/thenews/dec2002-daily/31-12-2002/main/main2.htm>>.

²⁵ For background on this point, see Feroz Hassan Khan, "The Independence-Dependence Paradox: Stability Dilemmas in South Asia," *Arms Control Today* 33, no. 8 (October 2003).

²⁶ See Peter R. Lavoy, "Fighting Terrorism and Avoiding War in South Asia: The Indo-Pakistani Situation," *Joint Forces Quarterly* (Autumn 2002), pp. 27-34.

²⁷ Different strategic logics underpinned U.S. and Soviet nuclear policies at different times during and after the Cold War. In fact, the nuclear strategies of the superpowers always exhibited the tension between the viewpoint that nuclear weapons were revolutionary instruments of warfare (where the capability to achieve a second strike was deemed sufficient for national security) and the perspective that they were much like other weapons (and thus a large force buildup was needed because relative capabilities mattered). For background, see Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca: Cornell University Press, 1989).

²⁸ A recent study cosponsored by the Council on Foreign Relations and the Asia Society also made this recommendation. See Frank G. Wisner II, Nicholas Platt, and Marshall M. Bouton, *New Priorities in South Asia: U.S. Policy Toward India, Pakistan, and Afghanistan* (New York: Council on Foreign Relations, 2003), pp. 27-28, 39, 57, <<http://www.cfr.org/publication.php?id=6486#>>.