

The May 1998 nuclear tests by both India and Pakistan, accompanied by the expressed intentions of both countries to become full-fledged nuclear weapon states, present the prospect of a new nuclear arms race in South Asia. Perhaps even more ominous is the potential for these events to promote degradation of security relations and proliferation of weapons of mass destruction beyond the region. This viewpoint addresses the broader prospects for the future of nuclear non-proliferation arising from the new circumstances in South Asia.

The essay first highlights the important links between the South Asian nuclear tests and proliferation problems in Asia more generally. The reasons for India's and Pakistan's decisions to test nuclear weapons are numerous. This viewpoint focuses on the links between the tests and circumstances elsewhere in the region to draw attention to the expanding number of reinforcing relationships among proliferation aspirants. In particular, an exploration of these links reveals that the South Asian nuclear tests were more a symptom than a cause of the now visibly weakening nonproliferation regime. These links also show that the task of curbing the spread of weapons of mass destruction has become more complicated, demanding new strategies on the parts of those governments and organizations working to achieve nonproliferation goals.

The essay then presents a set of scenarios describing a range of possible security futures in Asia in the wake of the nuclear tests and the tests' regional implications. This discussion aims less to assess the relative likelihood of the different scenarios than to highlight the dilemmas common to all of them. In particular, this survey of divergent future prospects points to the conclusion that the principles, norms, agreements, and rules that make up the global non-proliferation regime are today in deep trouble. The analysis focuses on certain imperatives that emerge despite the highly uncertain immediate future.

The essay concludes by arguing that these imperatives can only be met by concurrent efforts among a variety of parties. Although the highest responsibilities remain those of the governments in the region, attention and action from parties outside the region are also needed—most particularly from the United States, but also from other governments and non-governmental organizations (NGOs). Moreover, given the connections among the elements that affect nuclear proliferation prospects in Asia, the current dilemmas can be resolved only through strategies of *comprehensive engagement* on the parts of both

governments and NGOs. Although the South Asian nuclear tests seem to have derailed the cause of nuclear nonproliferation, concerted action informed by appreciation of the new circumstances offers reasonable hope of placing nonproliferation efforts on a course consistent with the prerequisites of global peace and security in the twenty-first century.

PROLIFERATION LINKAGES IN SOUTH ASIA AND BEYOND

Although India's five nuclear tests on May 3 and 5 were widely criticized, they met with rather tepid reactions from the world's leading powers² that were certainly insufficient to stave off Pakistan's subsequent "retaliatory" nuclear tests. With both countries accelerating development of sophisticated medium-range ballistic missiles and with nuclear "weaponization" perhaps already underway, the tests and policy declarations of both countries have raised the specter of a spiraling nuclear arms race in South Asia.

Two sets of issues raise questions as to whether a nuclear standoff between India and Pakistan would be as stable or enduring as that between the United States

VIEWPOINT: NONPROLIFERATION PROSPECTS AFTER THE SOUTH ASIAN NUCLEAR TESTS

by Wade Huntley¹

Dr. Wade Huntley is Program Director for Asia/Pacific Security at the Nautilus Institute for Security and Sustainable Development in Berkeley, California.

and the Soviet Union proved to be:

- First, these countries' history of war and crisis, coupled with their contemporary grievances, suggest a relatively greater prospect for future conflicts in which deliberate nuclear attack might be contemplated. Neither country is a "status quo" state for which deterring attack is a sufficient end. The ardent cultural and religious dimensions of this relationship are a particular source of uncertainty. Though both countries share important bonds and in past wars have shown some propensity to restrain the use of force, there remain clear prospects that crises could release deep animosities that overwhelm the kind of sober rationality assumed by theories of mutual deterrence.
- Second, the countries' territorial proximity is a crucial new variable. The United States and the Soviet Union, at a similarly early stage in their nuclear rivalry, could deliver nuclear weapons only by aircraft and therefore had hours of warning time of an attack. By the time deployment of ballistic missiles reduced this margin to ranges of 10 to 30 minutes, the Cold War rivals had acquired many years of experience with their nuclear relationship that thereby helped maintain stability. In contrast, India and Pakistan could traverse from latent nuclear ability to overt nuclear rivalry by deploying nuclear-armed ballistic missiles with flight times as short as three minutes. This possibility dramatically limits reaction times in crisis decisionmaking and hence prospectively increases the danger of inadvertent nuclear war.³

However, a more worrisome—and far less studied—implication of the prospect of a nuclear arms race between India and Pakistan is its potential to cause spiraling repercussions outside South Asia. Many countries in Asia and elsewhere in the world will be watching the progress of events with keen interest, and this progression is likely to have effects in other regions that will be difficult to anticipate.

The potential importance of such links between circumstances in South Asia and elsewhere is evinced in part by the role such links played in leading up to the South Asian nuclear tests themselves. Thus far, most attention has focused on those factors indigenous to the region, including the India-Pakistan relationship, Indian and Pakistani domestic politics, and Indian and Pakistani perceptions of external actors (such as China, the United States, and the nonproliferation regime). Less attention has focused on the links between proliferation

developments in South Asia and the roles played by actors and concurrent developments elsewhere in Asia and the world, particularly in contributing to India's and Pakistan's nuclear and missile development programs.

For example, assertions that China provided Pakistan with assistance in its nuclear weapon and ballistic missile development are well known. Pakistan reportedly has obtained from China crucial technology to support its nuclear program as well as complete M-11 nuclear-capable missiles. More recently, China is believed to have supplied plans and equipment to enable Pakistan to construct a factory for indigenous production of the missile. With a range of only about 280 kilometers, however, these missiles do not enable Pakistan to strike major Indian cities.⁴

India, for its part, has used Canadian-made nuclear reactors to produce plutonium for its weapons program and acquired technological information for its missile development program from both Russia and the United States. India's recently tested Agni missile, with an estimated range of at least 2,000 kilometers, was developed in part using technology originally purchased directly from the United States.⁵

The North Korea Link

Few have noted the ways in which North Korea's role in facilitating the missile proliferation in South Asia helped set the scene for the current crisis. India's nuclear tests came just five weeks after Pakistan successfully test-fired its new Ghauri missile. This nuclear-capable missile, with an estimated range of up to 1,500 kilometers and an estimated payload capacity of up to 700 kilograms, provides Pakistan with a potential nuclear threat against most major Indian cities. It is now known that the Ghauri was developed from North Korean Nodong missiles, sold in complete form to Pakistan in 1997 (even though they have yet to be provided to North Korea's own military).⁶

This missile sale advanced a North Korea-Pakistan relationship dating back to the 1970s and firmly established in the 1980s, when the two countries cooperated in providing military assistance to Iran during its eight-year war with Iraq. Growing cooperation between the two countries eventually involved North Korean acquisition of nuclear technology from Pakistan as well as an exchange of ballistic missile technology. Pakistani officials reportedly visited North Korea to observe Nodong

missile development in 1992 and 1993, and the Ghauri program reportedly dates to the December 1993 visit to China and North Korea by Benazir Bhutto, then Pakistan's prime minister.⁷ China is believed to have facilitated and assisted North Korean missile technology transfers to Pakistan, satisfying its desire to see Pakistan receive such technology while avoiding the kind of direct transfer that would threaten its relationship with the United States and other Asian countries.⁸ The subsequent North Korea-Pakistan cooperation in development of the Ghauri missile is also believed to have directly benefited North Korea's own cash-strapped missile programs. Such benefits included data provided in the April 6, 1998, test-firing of the Ghauri, which flew further than any previously tested North Korean missile.⁹ U.S. and South Korean officials speculate that this assistance may have contributed directly to preparations for North Korea's August 31, 1998, first test-firing of a Taepo-dong missile, which flew over 1,300 kilometers and demonstrated the country's achievement of multiple-stage rocket technology.¹⁰

Through its direct contribution to accelerating the missile technology race in South Asia, North Korea's actions helped create the context within which India made its decision to conduct nuclear tests. Admittedly, the Ghauri test was at most a precipitating factor in the decision by India's ruling Bharatiya Janata Party (BJP) to conduct the nuclear tests—a move that had been contemplated by other Indian governments for many years. However, India's deep-seated anxiety about its strategic position vis-à-vis China has long been a central rationale for India's nuclear program. Moreover, India has interpreted Chinese assistance to Pakistan as a crucial indication of China's strategic concerns. In this environment, the role played by North Korea's long history of assistance to Pakistan's missile development should not be discounted.

North Korean missile assistance to Pakistan, combined with its own missile development activities, also represents an important failure of the broader diplomatic effort by the United States to integrate North Korea into the world community and restrain its "rogue" behavior. Despite the significant effort that the United States has invested in seeking to gain agreement from North Korea to curb its missile technology proliferation, meetings between the two countries on this issue have been characterized mostly by lack of progress and frequent breakdowns. Meanwhile, North Korea managed to con-

duct its sale of missiles to Pakistan without obstruction.¹¹ In the wake of the nuclear tests, North Korea, ignoring heightened attention to this relationship, reportedly delivered to Pakistan several shipments of weapons materials that included warhead canisters for the Ghauri missile. These shipments reportedly took place amid indications that Pakistan is proceeding with production of the missile and development of nuclear warheads that can be carried by it.¹²

The Proliferation Network

Chinese and North Korean missile assistance to Pakistan epitomizes the emergence of a set of mutually reinforcing linkages among proliferation prospects—a *proliferation network*. This network introduces a new and troubling dimension to the problem of achieving arms control and preventing proliferation in the region and worldwide. This network is still in a nascent stage, consisting of only a confluence of relationships rather than a mechanism of direct coordination. Nevertheless, even at this level, the emerging network of links positively reinforces incentives for proliferation across disparate situations. Thus, more than ever, decisions and events in a given situation and region are likely to have unexpected and unintended implications in other places at later times.

The link between the circumstances of South Asia and the Korean Peninsula exemplifies this point. Concurrent to, but overshadowed by, the South Asian nuclear tests, North Korea threatened to effectively "suspend" its 1994 "Agreed Framework" accord with the United States under which it forsook its own incipient nuclear weapons program.¹³ The U.S. government immediately questioned North Korea's intention and/or capacity to follow through on the specific threats to "reopen" the reactors addressed under the Agreed Framework.¹⁴ However, more recent events have suggested that concern over the North Korean nuclear program is still warranted.¹⁵ The threats have (or at least should have) served to highlight a growing North Korean dissatisfaction with the rate of progress in achieving the ends of the Agreed Framework and in improving its relations with the United States.¹⁶ This discontent has likely contributed to the failure of U.S. diplomacy to achieve North Korean missile proliferation restraint. This proliferation, in turn, then became a contributing factor in South Asian instability and ultimately the nuclear tests.

Now, the South Asian nuclear tests may not only spark

a nuclear arms race in that region, but may also increase insecurity throughout Asia. In a potential “feedback,” events in South Asia indirectly encouraged, if not provided direct incentives for, North Korea’s most recent actions—especially the August 31 missile test.¹⁷ More broadly, the changed circumstances in South Asia have raised questions concerning the sustainability of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and may serve to obstruct ratification of the Comprehensive Test Ban Treaty in the U.S. Congress and START II in the Russian Duma.¹⁸ These cascading consequences threaten to erode the institutions, norms, and political cooperation supporting nuclear arms control, disarmament, and nonproliferation worldwide.

FOUR FUTURE SCENARIOS

The nuclear testing in South Asia has clearly altered the global terms of nuclear nonproliferation and shifted reference points in international politics more generally. However, the nature of these changes, and the new courses of action they may produce, are less evident. We cannot know how the achievement of full-fledged nuclear status by India and Pakistan will affect the future planning of North Korea, Iran, Iraq, and many other states with latent nuclear ambitions.¹⁹ Nor can we now know how the reactions of these and other states throughout the world will reshape near- and long-term prospects for arms control and nonproliferation.

In the context of this highly uncertain future, focusing on the core features of recent events can offer guidelines for expectations. In particular, it is possible to identify current “critical uncertainties”—that is, elements of the present situation that are simultaneously most important and most uncertain—that can help to delimit the range of future developments. Two such critical uncertainties are the prospect of an escalating South Asian arms race and the long-term reaction to South Asian developments by China.²⁰

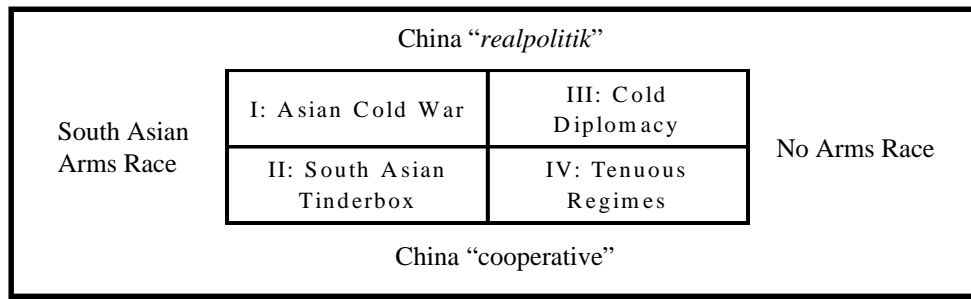
First, whether or not the South Asian nuclear tests will lead to a nuclear weapons and missile technology arms race on the subcontinent is unclear. To date, both India and Pakistan have made conflicting and ambiguous statements regarding their intentions to develop nuclear warheads light and durable enough to be delivered by ballistic missiles, as well as to continue past efforts to improve missile technologies.²¹ Despite some assurances by both governments, past patterns of reciprocal action by both India and Pakistan, particularly in the area of

missile development, evince a familiar “action-reaction” dynamic that may prove quite difficult for decisionmakers in these countries to escape.²² The implications such an arms race might have for the prospects and impact of violent conflict in South Asia demonstrate the importance of the stakes riding on this unpredictable variable.

Second, whether or not the long-term reaction to South Asian events by neighboring countries, particularly China, will be characterized by collaborative or *realpolitik* styles of diplomacy is similarly uncertain. The BJP leadership’s decision to conduct nuclear tests disrupted an incipient India-China *détente* that had been slowly developing in preceding years.²³ Following India’s tests, Pakistan reportedly approached China (as well as Western states) seeking security guarantees to meet this new security challenge. In the end, China determined it would neither extend Pakistan a nuclear deterrent (which would have been its first such promise ever to another country) nor provide any other direct security guarantee.²⁴ Nevertheless, the nuclear testing crisis has reduced pressure on China to curtail military aid to Pakistan, and it is likely to provoke greater Chinese involvement in South Asian affairs more generally. Moreover, the incentives for such involvement are bolstered by Chinese perceptions that the United States has not acted sufficiently to dissuade Indian nuclear ambitions, perhaps passively supporting them as a means to “contain” China.²⁵ Although the nuclear tests may not have greatly altered Chinese perceptions of Indian and Pakistani nuclear capabilities, the prospect of their nuclear “weaponization” adds a new dimension to Chinese threat perceptions.²⁶ Hence, the relatively moderate reaction of China in the immediate aftermath of the tests does not likely represent an enduring policy direction, and may in fact cloak a strategic uncertainty in Beijing in the face of new and unexpected circumstances.

The intersection of these two critical uncertainties indicates four possible scenarios for future developments, as Figure 1 depicts. Brief descriptions of each of these scenarios follow. Although the speculations and expectations outlined in these four scenarios could easily be expanded and enhanced, the descriptions below provide the scenarios’ essential features of divergence. More importantly, the scenarios also reveal certain common features that persist regardless of the disposition of the critical uncertainties. These convergent features are important because they offer vital clues to developing poli-

Figure 1: Possible South Asia Scenarios



cies to effectively meet the challenge of sustaining arms control and nonproliferation momentum.

Scenario I: Asian Cold War

Perhaps the most dangerous scenario is that in which a South Asian arms race does emerge and China responds with a *realpolitik* style of diplomacy. In this scenario, in reaction to Pakistan’s nuclear testing and in order to maintain its missile superiority over Pakistan, India would complete development of its Agni missiles and proceed with its Sagarika program to develop submarine-launched, nuclear-armed ballistic missiles, bringing most important Chinese cities and industrial areas within reach. China would perceive this acceleration of the South Asian arms race to pose a direct threat to its security, eliciting several reactions. First, China would enhance efforts to bolster Pakistan as a form of “balancing,” either directly or through tacit approval of North Korean direct assistance. Second, China would place increased emphasis on maintaining progress in its own nuclear arms deployments and weapons programs. Third, China would become increasingly reluctant to participate in regional arms control initiatives or enter into strategic arms negotiations, developments that neither Russia nor the United States would welcome.

Meanwhile, China’s support of Pakistan would aggravate the Indian-Pakistani political conflict. India would become increasingly frustrated as its ambitions for regional hegemony continued to be thwarted and its nuclear bid increasingly appeared to have backfired. Emerging criticism of the BJP for following this failed course might develop, creating serious political instability within India. At the same time, the pressures caused by the arms race could precipitate Pakistani economic and political collapse. These developments would reinforce the priority given to domestic politics across the

South Asian political spectrum and might thereby further inflame tensions and uncertainties.

Concurrently, in retaliation for growing Pakistani-Chinese links, India would aggressively pursue the rekindling of its Cold War links with Russia, links that have already begun to reemerge in the wake of the recent nuclear testing.²⁷ Gradually, China and Russia would become patrons of Pakistan and India, respectively, aggravating and hardening Sino-Russian relations and thereby extending the scope of the “cold” conflict to the entirety of Asia. This rivalry would further dampen incipient Chinese interest in arms control and extend China’s reluctance to strategic levels, while also reinforcing the recalcitrance that Russia has already displayed toward the START process. The prospect of a major Asian war, with nuclear dimensions, might ride on the hair trigger of a South Asian crisis, such as over the Kashmir.

The United States would become marginalized and diplomatically ineffective in an increasingly dangerous region. This would likely result in a militarization of its own position in the region, including heightened presence of troops and conventional force assets, support of the U.S.-Japan alliance through deployment of theater missile defense in Japan, and commitment to national missile defense in North America.²⁸

Scenario II: South Asian Tinderbox

Only slightly less dangerous would be the scenario in which a South Asian arms race emerges but China proceeds with an engagement style of diplomacy. In this scenario as well, India and Pakistan would proceed into nuclear weaponization and arming of missiles. India would still experience increasing frustration as its ambitions for regional hegemony are thwarted, with similar implications to those traced above. Meanwhile, the

danger of nuclear war in South Asia would be a constant menace dominating the world's attention.

At the same time, however, China would perceive its interests to lie in minimizing its own involvement in such increasingly dangerous circumstances. China would work to strengthen nuclear nonproliferation, rather than siding with Pakistan outright, for fear that the momentum generated by India and Pakistan could eventually lead to Iran, North Korea, and even Japan obtaining nuclear weapons.²⁹ Also, China would recognize the benefits to its position that are already evidenced by the world's regard of India as the "instigator" of the current crisis, which has resulted in tacit acceptance of limited Chinese support of Pakistan. This would further encourage China to increase its support for the nonproliferation and test ban regimes, calculating that their strength would help to ostracize India, thereby offering China an effective means to garner world support for its interest in containing Indian nuclear ambitions.

In this scenario, the political dynamics in South Asia would be strong enough to overcome efforts from outside the region to dampen volatility on the subcontinent. Chinese support for existing nonproliferation regimes would be at best ineffective in curbing rising tensions, and at worst a contributory factor insofar as India perceives those regimes to be discriminatory against its interests. In turn, despite consensus outside the region on the need to sustain the nonproliferation and test ban regimes, the rising nuclear danger in South Asia would raise incentives and political support in the United States for theater missile defense, as well as for strategies of militarized counterproliferation.

Scenario III: Cold Diplomacy

A scenario in which a South Asian arms race does not emerge but China nevertheless shifts to a more *realpolitik* style of diplomacy may seem the most unlikely, but nevertheless offers some instructive insights. In this scenario, neither India nor Pakistan pursues nuclear weaponization and arming of missiles, and their relations stabilize in mutual recognition of their respective statuses as latent nuclear powers. Nevertheless, China perceives India's nuclear status and extant missile technologies to offer sufficient direct threat to its own security that it reacts by committing itself, tacitly if not explicitly, to a strategy of nuclear deterrence built on superior capabilities. China would then sustain its own weapons

programs and reverse its emerging interest in regional arms control initiatives. Relying on its own deterrent, China would also be able to carefully gauge its support of Pakistan in an attempt to sustain a South Asian "balance" while not excessively provoking India. Declining Chinese interest in nonproliferation standards considered onerous by India would contribute to the success of this approach.

For its part, India would be driven to respond by pursuing links with Russia—not as aggressively as it would if engaging in an accelerating arms race, but certainly in diplomatic terms—perhaps to the extent of seeking some degree of countervailing nuclear guarantees. In this scenario, in contrast to the preceding one, the political dynamics in South Asia would be overcome by the influences from outside the region. Hence, China and Russia would still become patrons of Pakistan and India, respectively; although this process would take place more gradually, it would embed itself more strongly. Indeed, replicating the Cold War dynamic, the imposition of the growing China-Russia rivalry on South Asia would become one source of moderation in India-Pakistan tensions.

Scenario IV: Tenuous Regimes

Perhaps the most appealing scenario is that in which a South Asian arms race does not emerge and China follows an engagement style of diplomacy. In this scenario, a relative stabilization of South Asian relations would allow cooler heads to prevail. India, perhaps with a new ruling regime replacing the BJP, would find itself sufficiently satisfied with its *de facto* nuclear status that it would feel a stronger need to repair diplomatic relations around the world than to push forward on its missile development programs. At the same time, China would find itself able to forsake precipitous responses to India's actions and commit itself more deeply to multilateral processes of arms control. Both India and China would increasingly come to be satisfied with their respective regional influence and to regard each other as "status quo" states.

Continuing Chinese commitment to the nonproliferation and test ban regimes, combined with interest in joining other venues for arms control negotiations, would provide a sense for many that these regimes and processes were "surviving" the South Asian challenges. However, this confidence would prove illusory, for two

reasons:

- First, relative stability of India-Pakistan relations would fuel a counter-reaction to those who warned ominously of arms races, who would be labeled “alarmists.” Greater support would accrue to arguments that the two countries’ new nuclear status has not increased dangers in the region, and has in fact increased both India’s and Pakistan’s security by establishing mutual nuclear deterrence. Most importantly, the increasing credence given to such arguments would increase perceptions by other aspiring nuclear powers that a nuclear capability has military and political efficacy.
- Second, relative stability of India-Pakistan relations would increase pressure to recognize *de jure* what would be obvious *de facto*: India and Pakistan are nuclear powers. Denying India and Pakistan the same status as the other five “declared” nuclear powers, for the purposes of upholding the basis of the NPT, would rest on an increasingly fraying texture of argument. At the same time, the logic that accepting India and Pakistan into the treaty as full-fledged nuclear powers would simply reward their proliferation and undermine the treaty would still hold. The nonproliferation regime would be caught in the grip of this dilemma, which could be dealt with only by finessing both concerns, likely alleviating neither.

The combination of the apparent security benefits of nuclear deterrence and the long-run inability of the P-5 nuclear states to deny the nuclear status of India and Pakistan would undermine nonproliferation efforts in this otherwise apparently favorable scenario. While the nonproliferation regime would endure in name, it would become an increasingly ineffective tool with which to meet the growing prospects of proliferation of nuclear weapons (and other weapons of mass destruction). With the benefits of participation in this regime apparently declining, and simultaneously the material benefits and prestige of attaining an independent nuclear capability apparently rising, other states would have greater incentives to force their way into the nuclear “club”—North Korea and Iran being merely the next in line.

Scenario Commonalities

Common to each of these four scenarios is the conclusion that the global nonproliferation regime is today in deep trouble. This conclusion clearly emerges from the scenarios in which the South Asian nuclear tests

presage a dangerous and destabilizing arms race in South Asia and/or turn China away from its more recent movement toward greater integration into international regimes and multilateral forums. However, this conclusion also derives from the “optimistic” scenario in which the absence of more dire consequences ironically works specifically to invalidate current arguments against the ascension of India and Pakistan to nuclear weapon status. More generally, that same lack of consequences would undermine the importance of the principles, norms, agreements, and rules that make up the nuclear nonproliferation regime.

Indeed, the omnipresence of this conclusion across the scenarios helps highlight an important additional observation: the global nonproliferation regime was in trouble before the South Asian nuclear tests. The tests themselves were merely a symptom of this condition, not its cause; progress on nuclear arms control was already slowing and proliferation prospects were already increasing. A sense of a diminished gravity to the “nuclear threat”—perhaps the result of the lingering euphoria given by the end of the Cold War era’s prospect of massive nuclear war—helped conceal the eroding foundation of the global nonproliferation regime. At the same time, the emergence of a nascent proliferation network has helped hasten this erosion. Thus, the weakening of the nonproliferation regime would have become apparent in due time, even without this year’s events in South Asia. Ironically, as William Arkin has pointed out, we ought to be somewhat thankful to India and Pakistan for reawakening interest in and concern about these problems as early as they have.³⁰

The question then becomes: what is to be done? This question highlights a second conclusion common across the four scenarios above: none of the options open to the principal state actors in the Asian region offers strong hope that their actions alone can provide for the long-term future of the nonproliferation regime. Clearly, actions by parties outside the region—both governments and NGOs—are needed. Moreover, such actions must be grounded in a strategic concept reflecting both the changes and consistencies manifested by the contemporary proliferation problem.

TOWARD A NEW NONPROLIFERATION STRATEGY

The current erosion of the nonproliferation regime—a regime designed during the Cold War to meet the

circumstances of the Cold War—should not be too surprising. The challenge now facing organizations and governments working toward nonproliferation and arms control objectives is to recast those objectives to fit the post-Cold War era. The new characteristics of this era include a disaggregation of the Cold War's bipolar organization of world politics, the resulting greater complexity and ambiguity of international relationships, and hence the increasing relevance of less obvious links among disparate regions and circumstances. This essay's diagnosis of a "proliferation network" seeks not to identify a cause, but rather a condition: proliferation problems can no longer (if they ever could) be treated in isolation from one another. The problem of proliferation is better understood and treated in an integrated and holistic manner.

Accordingly, governments and NGOs seeking to promote arms control and nonproliferation need to begin with a strategy that recognizes the importance of links among discrete proliferation problems. This strategy would entail seeking to identify those links when fashioning solutions, and therefore would require active and multifaceted interaction, incorporating positive as well as negative inducements. Adopting such a strategy, which might best be called *comprehensive engagement*, would be a first step toward generating a nonproliferation regime strong enough—and inclusive enough—to overcome current incentives for proliferation.

For governments in general, and for the United States in particular, a strategy of comprehensive engagement would go beyond the tactics of selective engagement manifested in recent years, by fully embracing each of five elements:

- First, comprehensive engagement must continue to involve bilateral engagement on a country-by-country basis. This is the current U.S. policy premise toward North Korea, and no other policy premise holds more promise despite the ruling regime's inscrutability and recalcitrance. Shutting off current contacts would only encourage this "isolated" regime to bolster its existing contacts with other proliferation aspirants, such as Iran and Pakistan. Indeed, simply the prospect that existing punitive policies will be ended offers incentives for regimes such as that in North Korea to respond positively to direct engagement (one source of the recent decline in U.S.-DPRK relations is in fact a growing conviction among North Korean leaders that there exists no realistic prospect of end-

ing current U.S. economic sanctions). However, even in such bilateral contexts, there is room for more integrated approaches treating bilateral relationships in their entirety and focusing on the linkages between different issues within those relationships.

- Second, comprehensive engagement means sustaining requisite levels of attention and commitment to engagement over time. Too often, the United States focuses on a proliferation problem only at moments of crisis. The specific efforts to engage North Korea in 1993-94 and India today—while laudable under the circumstances—demonstrate this tendency. Moreover, in allowing itself to garner a reputation for addressing problems only when they become crises, the United States risks encouraging governments (or even non-governmental actors) to *create* crises by taking provocative action in order to be regarded "seriously" by U.S. policymakers. Such thinking may have been an underlying factor in India's decision to go forward with nuclear testing, and is likely a key source of the current crisis in U.S.-DPRK relations. The United States cannot hope to sustain a consistent and successful nonproliferation policy if each abated crisis is followed by waning attentions and flagging efforts, which only sow the seeds for a new crisis.

- Third, comprehensive engagement requires a conception of involvement with a region as a dynamic system, not simply with each of the countries within it. In particular, the United States has too often neglected the long-term systemic implications of seemingly prudent short-term tactics, thereby directly contributing to the type of regional proliferation it ostensibly opposes. For example, the Chinese M-11 sale to Pakistan followed shortly the U.S. sale of F-16 fighters to Taiwan, which China saw as a direct violation of the U.S. pledge to limit its transfers of military weaponry to Taiwan.³¹ To the extent that the F-16 sale to Taiwan undermined U.S. credibility in persuading China to limit its own arms transfers in the region, the sale may have indirectly contributed to South Asian missile proliferation. At a broader level, this U.S. tendency to ignore the longer-term regional consequences of shorter-term, bilaterally-focused decisions has contributed to creating the peculiar situation in which, as noted earlier, both India and China perceive the United States to be tacitly and/or surreptitiously tilting in support toward the other.³² The United States will be unable to achieve nonproliferation generally until it can more effectively introduce anticipation of such long-

term systemic consequences into its short-term decisionmaking.

- Fourth, comprehensive engagement must mean that the United States, and other nuclear weapon states seeking nonproliferation, recognize more clearly how their own lack of progress toward nuclear arms control increases pressures for nuclear arms acquisition. Despite their commitment to the goal of vertical disarmament in the NPT, nuclear arms control negotiations between the United States and the Soviet Union often achieved only a brief respite in the two superpowers' nuclear arms race. Occasionally, as in the SALT I Treaty's incentives to develop MIRV missile technologies, they even redirected that race in new and more dangerous directions. After important early progress, the slowing pace of the START process falls short of the arms control promises offered by the United States in negotiations for the indefinite extension of the NPT in 1995. The growing disregard of this promise by nuclear weapon states now threatens to undermine preparations for the next review of the NPT in 2000.³³ At the same time, U.S. programs for sub-critical nuclear testing and continuing weapons "stewardship" effectively obviate much of the spirit, if not the letter, of the 1996 Comprehensive Test Ban Treaty. Thus, India does have a point, if not a justification, in emphasizing years of unfulfilled promises for progress toward disarmament by nuclear-armed states as motivations for its own nuclear program. Indeed, this relation between "vertical" and "horizontal" proliferation is one of the key linkages of the proliferation "network." The United States and other nuclear-armed states cannot expect their condemnation of India's actions to be credible in the absence of recognition of this linkage.

- Finally, comprehensive engagement means developing an appreciation for the political context of proliferation. During the Cold War, there developed a popular tendency to regard nuclear weapons issues as largely independent of politics. Ironically, nuclear strategists and nuclear abolitionists shared this perception: the former in holding that nuclear weapons impose a logic of their own, bestowing a certain universality to theories of deterrence and war-fighting; the latter in holding that the sheer horror of nuclear war renders use of nuclear weapons "unthinkable." The end of the Cold War itself repudiates this notion. Despite force levels and launching capabilities that are as lethal as ever, the perceived threat of deliberate

nuclear war between the United States and Russia has been dramatically reduced. The source of this reduced threat of war is the improvement in political relations between these countries, which has decreased the animosities and uncertainties that have always lurked behind the abstract veneer of strategic theory. Improved political relations, not improved strategy, moved the superpowers toward greater actual peace. The lesson for Asia is clear: only sufficiently thorough and enduring improvements in the political climate can reduce intrinsic temptations to proliferate, thus offering hope of achieving nonproliferation goals in the long term. Neither the spread of nuclear weapons, nor the prevention of that spread through punitive sanctions or coercive counterproliferation, is likely to help produce that peace.

A strategy of comprehensive engagement would also have significant implications for the specific activities of NGOs and social movements. Insofar as most such organizations already evince orientations of engagement—in large measure by definition—such a strategy will come more naturally for them than for governments. At the same time, many such organizations also have organizational and practical constraints that obstruct their capacity to fully consider the myriad second- and third-order implications of their activities. Nevertheless, committed activists who are inattentive to the increasingly integrated nature of international proliferation (and international interactions more generally) will often find their ends frustrated by unintended consequences. Incorporation of an awareness of these conditions into strategic thinking should include at least these elements:

- First, as NGOs and social movements continue to pressure governments to take action on specific issues, it becomes incumbent upon them to think through the networking implications of the actions they promote. Careful consideration of implications may in some instances undermine the rationale for the proposed actions, but in other cases this thinking is certain to underscore the rationale. In this manner, committing to a strategy of promoting comprehensive engagement by governments may help NGOs and social movements to focus on fewer prescriptions with more powerful supporting arguments.

- Second, the conditions that suggest the efficacy of a strategy of comprehensive engagement also provide unique opportunities to NGOs and social movements. The very same networks of interac-

tions that complicate the proliferation problem and frustrate governmental authority also create new loci of authority and new entree to critical problem junctures. NGOs and social movements are ideally positioned to take advantage of these, because they are more flexible than modern state governments. In short, world complexity creates new targets of opportunity for effective action that non-governmental groups may be best suited to pursue.

- Finally, the complex relations that fuel the proliferation network are themselves a new resource for NGOs and social movements. These groups can—and likely should—focus increasing attention and resources on developing “countervailing networks” that would utilize the same global interdependence that facilitates the proliferation network, but for different ends. Such an approach would seek to exploit the positively reinforcing elements of interdependence, and could potentially be more effective than strategies of solitary direct action.

CONCLUSION

The proliferation problem in Asia today has many sources, of which the shortcomings of U.S. nonproliferation policy constitute only one. However, the United States, now the world’s sole superpower and likely to remain so for some time to come, has an assurance of its own basic security needs and hence a latitude of behavior far exceeding that of any other nation. The long shadow that its own nuclear weapons attitudes and policies cast over those of all other governments provides the United States with a unique capacity to “lead by example” on nuclear weapons issues. This offers the United States an unprecedented opportunity to articulate and pursue a long-term vision for national and global security in which the role of threats to use nuclear weapons is dramatically reduced or even eliminated.

Whether or not the United States is able to take the lead in building regional and global security regimes that rely less on threats to use nuclear weapons, this nevertheless must remain the essential goal of nonproliferation advocates. During the Cold War’s long nuclear stalemate, the argument arose that mutual nuclear deterrence was in fact a force for peace, strongly discouraging actual war between the superpowers.³⁴ Such perceptions endure; indeed, one of the most intractable features of the proliferation problem is that not all agree even that proliferation *is* a problem. Clearly this was not

the view of the great majority of Indian and Pakistani citizens who favored their countries’ acquisition of deployed nuclear capabilities—even as many of them also anticipated the eventual use of these weapons.³⁵

This notion is an illusion: the psychological vulnerability and political tension engendered by mutual assured destruction provided *genuine* security to no state. While the threat of nuclear destruction may have helped to stave off overt military conflict among nuclear-armed states, nuclear deterrence did nothing to promote (and may in fact have impeded) the resolution of the political conflicts fueling the rivalries of these states. The term “Cold War” properly evokes a sense of the condition of fear-ridden “warlessness”—Hobbes’ “state of war”—prevalent throughout the Cold War period (and perhaps becoming forgotten as this period slips into history). The improved conditions of major power relations in the wake of the Cold War, however limited they remain, reveal starkly the paucity of the “security” provided to the superpowers by their nuclear weapons during the Cold War itself. Progress toward genuine nuclear disarmament, in all its facets, depends upon debunking the illusion of “nuclear peace” wherever it emerges, and building security regimes that would aim ultimately at replacing persistent dependence on nuclear deterrence.

The predominant justifications for India’s and Pakistan’s nuclear tests, drawing as they do on Cold War-era conceptions of the political utility of nuclear weapons and other technologies of mass destruction, represent a dramatic turn away from this realization. In pursuing their nuclear options, India and Pakistan certainly perceive themselves as pursuing legitimate security interests and in fact behaving no differently than did the United States and the Soviet Union throughout the Cold War. Indeed, many of the United States’ own nuclear policies and practices also still derive from such calculations. But emulation is not validation. In a nuclear-armed South Asia, India will depend for its security—as it never has before—on the prudence, competence, and authority of decisionmakers in Islamabad (just as the United States, as much today as during the Cold War, relies upon command and control coherence in Russia). For its part, in addition to a similar security dependence upon New Delhi, Pakistan will labor under crushing economic and political burdens to maintain not only its nuclear “deterrent” but also its very integrity as a state. Meanwhile, for the citizens of Bangladesh, Sri Lanka, and other neighboring states, the world today is an irre-

vocably more dangerous place.

In such a world there is little hope of progress toward conflict resolution and durable peace, and every prospect for the continued fear-driven construction of apocalyptic weapons accompanied by faith in abstract theories—against the lessons of history—that the weapons will never be used. Nuclear nonproliferation, arms control, and disarmament thus remain urgent goals for governments and non-governmental organizations alike. Progress toward these goals is necessary not merely to reduce the nuclear danger, but also because reducing the presence of nuclear weapons in global life is a means to the more fundamental end of moving the world from insecure warlessness to a more genuine peace. In a reciprocal fashion, only by making progress toward this political end will dramatic reductions in nuclear arms levels, and decreased dependence upon nuclear deterrence as a method of security, become possible.

¹ An earlier version of this paper was presented at the Alternative Security Conference, Manila, Philippines July 22-25, 1998. I wish to thank Tim Savage for extensive assistance with research and subsequent revisions, Jeffrey Knopf for attentive and thoughtful advice, and two anonymous reviewers for *The Nonproliferation Review* for frank and constructive comments.

² See "G8 Meeting," *Disarmament Diplomacy* 26 (May 1998), p. 51.

³ For an argument that this circumstance would create strong temptations for pre-emptive strikes and "launch-on-warning" strategies, placing tremendous time-critical pressures on decisionmakers and command and control systems with past histories of incoherence and no experience in explicit nuclear contexts, see Ben Sheppard, "Too Close for Comfort: Ballistic Ambitions in South Asia," *Jane's Defence Weekly*, May 19, 1998. For an account preceding the nuclear tests of the unpreparedness of India's nuclear infrastructure, see Manoj Joshi, "Nuclear Weapons: In the Shadow of Fear," *India Today* (Delhi), July 21, 1997, pp. 62-65. Recent reports suggest India has delayed implementation of a nuclear command and control structure, either due to internal strategic indecision or as a bargaining tactic in discussions with the United States; see Pamela Constable, "India Plays Nuclear Waiting Game," *The Washington Post*, September 14, 1998, p. A15. For a contrasting argument that geographic proximity functions as a stabilizing factor insofar as any nuclear exchange might expose both India and Pakistan to radioactive fallout even from their own weapons, see S. Rashid Naim, "Asia's Day After: Nuclear War between India and Pakistan?" in Stephen P. Cohen, ed., *The Security of South Asia: American and Asian Perspectives* (Urbana: University of Illinois Press, 1987), pp. 260-269.

⁴ Sheppard, "Too Close for Comfort;" see also Joseph Bermudez, "A Silent Partner," *Jane's Defence Weekly*, May 15, 1998.

⁵ R. Jeffrey Smith, "A Feared Scenario Around The Corner," *The Washington Post*, May 14, 1998. These missiles have been tested successfully on three occasions, and reportedly will be ready for full-scale production with only five more tests. Indian scientists reportedly are now confident that the Agni can carry a one-ton payload up to 2,500 kilometers (1,500 miles). See Sheppard, "Too Close for Comfort," and Andrew Koch and Waheguru Pal

Singh Sidhu, "Subcontinental Missiles," *The Bulletin of the Atomic Scientists* (July/August, 1998), pp. 48-49.

⁶ Bermudez, "A Silent Partner;" see also Rahul Bedi and Duncan Lennox, "Pakistan reveals test firing of new ballistic missile," *Jane's Defence Weekly*, April 16, 1998.

⁷ *Ibid.*

⁸ *Ibid.*; and Sheppard, "Too Close for Comfort." In particular, China may have provided assistance with guidance technology to help Pakistan overcome the Nodong's poor accuracy. See Koch and Sidhu, "Subcontinental Missiles," p. 45.

⁹ Bermudez, "A Silent Partner." At that time, the only preceding test of the Nodong was in May 1993; that missile flew 500 kilometers, half its estimated range. See David C. Wright, "Will North Korea Negotiate Away Its Missiles?" *NAPSNet Policy Forum Online* #16, April 8, 1998 (http://www.nautilus.org/napsnet/fora/16A_Wright.html).

¹⁰ See David Wright, "Analysis: DPRK Missile Test," *NAPSNet Daily Report*, September 1, 1998, and Joseph S. Bermudez, "First Test of North Korea's Taepo-dong 1 IRBM," *Jane's Defence Weekly*, forthcoming. Initially the missile launched was thought to be a two-stage Taepo-dong-1, based on Nodong technology; more recently U.S. officials reportedly have concluded that the rocket actually consisted of three stages. The last of the stages, powered by solid fuel and carrying a small satellite, is thought to have failed. This conclusion suggests North Korea's program aims to build intercontinental ballistic missiles and may be more advanced than previously believed. See various media reports summarized in "DPRK Satellite Launch," *NAPSNet Daily Report*, September 15, 1998.

¹¹ Foreshadowing the now renowned U.S. failure to anticipate India's first nuclear tests, U.S. officials have acknowledged that the United States was unaware of the Ghauri transaction until it was completed. See Smith, "A Feared Scenario Around The Corner"; and Tim Weiner, "U.S. Says North Korea Helped Develop Pakistani Missile," *The New York Times*, April 11, 1998, p. A3.

¹² Unnamed U.S. officials and U.S. intelligence reports, as cited in Bill Gertz, "Pakistan's Missile Program Aided By North Korea," *The Washington Times*, September 14, 1998.

¹³ Elisabeth Rosenthal, "North Korea Suspends '94 Nuclear Freeze Pact," *The New York Times*, May 13, 1998.

¹⁴ U.S. State Department Spokesman James Rubin, "State Dept. Noon Briefing, July 6, 1998," Washington, USIA Transcript 07/07/98.

¹⁵ Informed observers express concerns beyond those raised by recent reports of construction of an underground nuclear facility at Yongbyon. As to the facility itself, unnamed U.S. officials have been quoted as saying that the facility was so easily detected by U.S. spy satellites that the officials believe North Korea wanted U.S. intelligence analysts to find it. See Mark Hibbs, "Tunnel-Building Near Yongbyon Was 'Crying Out To Be Found,'" *Nuclear Fuel*, August 24, 1998.

¹⁶ See L. Gordon Flake, "Potential Crisis with the Geneva Agreed Framework between the U.S. and the DPRK," *NAPSNet Policy Forum Online* #19, August 18, 1998 (http://www.nautilus.org/napsnet/fora/19A_Flake.html); originally distributed as PacNet #32 on August 7, 1998). At the same time, North Korean contumacy toward International Atomic Energy Agency (IAEA) inspections, according to IAEA officials, has undermined (perhaps irreversibly) their ability to verify North Korea's nuclear material inventory, a precondition for completion of the light water reactors to be provided under the Agreed Framework. See "IAEA Can't Use Tried and True Means to Reconstruct DPRK Reactor History," *Nuclear Fuel*, February 23, 1998.

¹⁷ Many analysts have noted the apparently poor timing of the missile test, which aborted Japan's pending approval of funding for the Korean Peninsula Energy Development Organization (KEDO) and disrupted a promising round of talks with the United States. Two of the most prominent explanations for the North Korean action are that it was intended to demonstrate its missile capabilities to potential purchasers or, conversely, to raise the "price" it would cost the United States to curb the DPRK missile program. Both of these motives would have been positively reinforced by events in South Asia: the former through the prospect of increasing demand for missile technologies by countries such as Pakistan and Iran; the latter through the dem-

onstration that precipitating crises is an effective means of gaining attention and deference from the United States. See Wright, "Will North Korea Negotiate Away Its Missiles?"; Wright, "Analysis: DPRK Missile Test;" and Bermudez, "First Test of North Korea's Taepo-dong 1 IRBM."

¹⁸ See John Isaacs, "Senate: Test ban prospects shaken," *The Bulletin of the Atomic Scientists* 54 (July/August, 1998), p.40; and Igor Khripunov & Anupam Srivastava, "From Russia, a muted reaction," *The Bulletin of the Atomic Scientists* 54 (July/August, 1998), p. 42.

¹⁹ Iran's current strategic position is particularly disturbing. Iran already shared borders with nuclear-armed Russia and with Iraq, a state whose reported use of chemical weapons against Iran was met with little objection from the international community. Off its shores in the Persian Gulf and Indian Ocean, Iran faces the prodigious naval forces of the nuclear-armed United States. Nearby lies Israel, an intrinsic adversary with a tacit nuclear weapons capability (for a recent revealing exegesis of the Israeli nuclear program see Avner Cohen, *Israel and the Bomb* [Columbia University Press, 1998]). With nuclear weapons capabilities now also in the hands of Pakistan, another neighbor with whom Iran has difficult relations, ascendant strategic threat perceptions in Tehran are not difficult to imagine. Of course Iran, as an NPT member, also faces important incentives not to develop nuclear weapons. Given the complex balance of incentives Iranian leaders face, the impact of the South Asian nuclear tests on Iranian judgments of the merits of attaining a nuclear capability is as important as it is uncertain.

²⁰ I deliberately omit here a third critical uncertainty—the long-term course of action by the United States—because my intention is to offer outlooks relevant to weighing alternative U.S. policy directions.

²¹ Some reports suggest both India and Pakistan already possess missile-deliverable nuclear warheads. See Sheppard, "Too Close for Comfort."

²² For example, Pakistan's testing of its Ghauri missile followed India's development and testing of its Agni missile. See Koch and Sidhu, "Subcontinental Missiles," pp. 44-49.

²³ See Stephen P. Cohen, "India's Strategic Misstep," *The New York Times*, June 3, 1998.

²⁴ Elisabeth Rosenthal, "China Seems To Deny Pakistan A Nuclear Umbrella," *The New York Times*, May 21, 1998.

²⁵ Author's interviews in China with individuals familiar with that country's nuclear policy. Some interlocutors were skeptical of U.S. claims not to have detected evidence of India's pending nuclear tests beforehand. At the same time, many Indian representatives publicly and privately assert that the United States has been lax in efforts to restrain China's support of Pakistan's nuclear and missile programs, representing a tacit ambition to "contain" India. I take up the issue of these conflicting perceptions of the U.S. role below.

²⁶ Indeed, China expressed less concern over the nuclear tests themselves than the subsequent candid admissions by Indian leaders as to the prominence of concerns about China in India's strategic outlook. Chinese leaders will undoubtedly be carefully watching India's progress in developing an improved Agni missile, as well as in its Sagarika program aimed at developing nuclear-powered submarines carrying nuclear-armed missiles capable of reaching targets deep inside Chinese territory. On this latter prospect, see Koch and Sidhu, "Subcontinental Missiles," p. 49.

²⁷ *Jane's Intelligence Review* reported that India concluded a US\$2.6 billion contract with Russia to build two nuclear power reactors in southern India in reciprocation for Russian help on a project to build a nuclear-powered submarine by 2004 (Associated Press, "India to Build Nuclear Sub by 2004 With Russian Help," June 26, 1998).

²⁸ See Charles Krauthammer, "Defenseless America," *The Washington Post*, May 22, 1998.

²⁹ Benjamin Kang Lim, "China Fears Nuclear Proliferation," Reuters, May 29, 1998.

³⁰ William M. Arkin, "Misplaced priorities," *The Bulletin of the Atomic Scientists* 54 (July/August, 1998), p. 72.

³¹ In the 1982 joint communiqué with China, the United States agreed not to increase weapons sales to Taiwan "either in qualitative or in quantitative terms" beyond the levels of preceding years, and to reduce sales over time. The 1992 \$5.8 billion sale of 150 F-16 fighter/bombers increased U.S. arms sales to Taiwan by more than 1,000 percent. The Chinese government vehemently protested the sale, saying it violated the 1982 agreement, and has

since similarly protested numerous other U.S. arms sales to Taiwan, most recently of \$350 million in Stinger anti-aircraft missiles, Harpoon anti-ship missiles, MK-46 anti-submarine torpedoes and other equipment. See various media reports summarized in "U.S. Military Sales to Taiwan," *NAPSNet Daily Report*, August 28, 1998. Comprehensive and up to date information on U.S. arms sales to Taiwan can be found at the Federation of American Scientists web site (<http://www.fas.org/asmf/profiles/taiwan.htm>).

³² Although this circumstance is likely most symptomatic of the level of distrust and suspiciousness characterizing India-China relations, working to overcome these perceptions will be an important determinant of U.S. effectiveness in acting as an agent of nondiscriminatory nonproliferation norms in Asia.

³³ The breakdown and failure of the second Preparatory Committee meeting for the 2000 Review Conference, held April 27 to May 8, 1998, was in good measure due to the widespread perception that the nuclear weapons states (in particular the United States and Russia) were attempting to roll back the commitments to disarmament included in the decisions underlying the 1995 indefinite extension of the NPT. See Rebecca Johnson, "Reviewing the Non-Proliferation Treaty: Problems and Processes," Acronym Institute Report #12, September 1998, pp. 9-10.

³⁴ The classic statement of this strategic effect of nuclear weapons is Kenneth N. Waltz, "The Spread of Nuclear Weapons: More May Be Better," *Adelphi Paper* 171 (London: International Institute for Strategic Studies, 1981). Among the more prominent proponents of this view among historians of the Cold War is John Lewis Gaddis, *The Long Peace* (Oxford: Oxford University Press, 1989).

³⁵ An opinion poll published in the *Times of India* shortly after India's tests showed that 91 percent of urban Indians approved of the tests and 82 percent believed the country should now build nuclear arms, while 80 percent also believed Pakistan would follow suit with its own tests. Another poll published the day before Pakistan's first tests showed that 70 percent of urban Pakistanis favored testing even as 80 percent perceived a chance of war with India and 64 percent believed India would use nuclear weapons in the event of war. See Ramesh Thakur, "India Was Wrong to Test, but What Can the World Do?" *International Herald Tribune*, Tuesday, May 19, 1998; and "The Hardest Choice," *The Bulletin of the Atomic Scientists* 54, (July/August 1998), p. 36.