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# THE NEW NUCLEAR THREAT: U.S. POST-PROLIFERATION POLICY IN SOUTH ASIA Andrew Tiffin

With the end of the Cold War and the reduced danger of strategic nuclear conflict, U.S. policy makers are now paying greater attention to a new type of nuclear threat—nuclear proliferation. The appearance of new nuclear weapons states promises to usher in a more dangerous era of proliferation requiring a new type of policy. In contrast to arguments that "more may be better," this essay maintains that the introduction of nuclear weapons into certain regions may be destabilizing, and that this is especially so in the case of South Asia. India and Pakistan are now both de facto nuclear powers. The essay looks at a number of U.S. policy responses to this situation, ranging from diplomacy, to the transfer of stabilizing technology, to further U.S. efforts at strategic arms control.

For the last 45 years, the United States has worried about the acquisition of nuclear weapons by other nations. With the end of the Cold War and the downgrading of the nuclear threat from the former Soviet Union, the nuclear capability of smaller regional powers promises to be an even more important item on the national security agenda. This issue has been dramatically thrust into the public spotlight with revelations of Iraq's secret quest for a nuclear arsenal and has been cited by the new Secretary

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for Defense, Les Aspin, as one of the four principal threats to be dealt with by the new Clinton administration.

Until now, the main thrust of U.S. non-proliferation policy has been an attempt to prevent the emergence of new Nuclear Weapons States (NWS) on the world stage. The United States has hoped that a combination of secrecy, export controls, and inspections of civilian nuclear facilities would prove sufficient to thwart the designs of any nation wishing to acquire nuclear weapons. Unfortunately, such hopes have proven to be overly optimistic. As the example of Iraq has shown, weapons technology is sufficiently aged and well understood to ensure that any nation that is determined to build a bomb will eventually be able to do so, with or without American consent. When nations have decided that their national security requires a nuclear option, they have been able to develop their own nuclear weapons programs despite the best efforts of the United States. They are now set to deploy the results of these programs, leading the world into a new and much more dangerous era of nuclear proliferation. Such an era may require a significantly different policy approach. This essay discusses the elements of a new approach. Taking South Asia as the area most likely to confront future policy makers, and assuming that both India and Pakistan now have a rudimentary nuclear force, what should the United States do in a post-proliferation environment?

# NUCLEAR PROLIFERATION: THE U.S. INTEREST Why Worry?

The first obvious question is: should the United States "do" anything? Although the horrific nature of nuclear weapons causes many people to accept the benefits of non-proliferation at face value, a number of political scientists have challenged this conventional wisdom. Perhaps the most cited example of this school of thought is the 1981 paper by Kenneth Waltz entitled "The Spread of Nuclear Weapons: More May be Better." Based on an underlying faith in nuclear deterrence, his paper argues that the spread of nuclear weapons may in fact add to global stability. If such deterrence was successful in preserving the peace between two antagonistic superpowers during the Cold War, he asks, why would it not do the same for other nations? Perhaps further proliferation could create a series of peaceful regional balances and produce a global system of general deterrence that dissuades all nations from aggression (Brito and Intriligator 1983, 137). The nuclear age is the longest period without war between the great powers since the foundation of the modern state system in the 17th century. Would not U.S. interests best be served, therefore, if this type of peace were to spread over the entire globe? Following this line of reasoning, policy aimed at preventing proliferation actually prolongs global instability and reflects an underlying ethnocentric bias which sees the developed countries of the North as the only nations "mature" enough to be trusted with such weapons. However much the United States may disagree with their policies, Waltz argues, the political leaders in other proliferating nations are not suicidal. They are quite capable of ends-means rationality and are thus quite capable of being deterred by nuclear weapons which clearly and unambiguously remove any possible gains from aggression. The "irrationality" of such leaders, so feared by the nuclear armed states of the North, will most likely be replaced by caution and moderation once they find themselves within a nuclear balance. There is even limited historical evidence for such nuclear-induced moderation in the case of China. After acquiring nuclear weapons in 1964, nuclear rationality and caution set in almost immediately. Wild statements welcoming nuclear war quickly ceased and were replaced by a much more responsible attitude (Quester 1984).

When Pierre Gallois put forward the pro-proliferation thesis in the 1960s, however, Hedley Bull countered by arguing that the logic of preventing war through proliferation was similar to preventing automobile accidents by placing a small pile of nitroglycerine on every car bumper. Everybody would certainly drive more carefully, and there would likely be far fewer accidents. People being human and cars breaking down, accidents would still occur, however, and with infinitely more horrible results (Ezz 1989, 36). The point should be well taken. A fully credible deterrent requires that a nation actually be ready and willing to go to war, and be demonstrably capable of launching a nuclear attack on its opponent. Yet, the system and organization that are set up to do this may be prone to miscalculation or accident. While no "rational" person would launch a nuclear attack given an alternative, there is always the finite risk of inadvertent war (Harvard Nuclear Study Group 1989, 263). Similarly, even in the face of a credible and guaranteed response, as long as there is a difference between striking first and striking second (during the Cold War this difference could be measured in tens of millions of casualties), a rational person may still attack if it is believed that war is inevitable (or if it is believed that the opponent thinks so). In a crisis situation, with pressing time constraints, and with incomplete or misleading information, the chance of such misjudgment becomes dangerously real. Therefore, although people today might look back fondly at the past 45 years and claim that the nuclear peace was infallible, it was not. Throughout the Cold War there was always a finite chance that the superpowers could go to war, yielding a relationship more accurately described as a "delicate balance of terror" than "stable deterrence." As we look to the future benefits of proliferation, therefore, we would do well to keep this in mind. As long as there is a finite possibility of conflict, increasing the number of nuclear rivalries will increase the chance that sometime, somewhere, these weapons will be used.

Furthermore, it may be inappropriate to compare future regional conflicts with the one that existed between the United States and the Soviet Union during the Cold War. There is reason to believe that this finite risk may have been as low as it was only because of specific geostrategic and technological factors which may be absent in future regional rivalries. Thus, there is a potentially greater chance of nuclear war actually breaking out in these new nuclear regions.

#### **Regional Conflicts**

As a number of critics of the pro-proliferation thesis have pointed out, the "stability" of the superpower balance was not the product of nuclear weapons alone. It rested on an assured second strike capability-the ability to retaliate with nuclear weapons even if the opponent attacked first (Dunn 1991, 24-5). The rudimentary forces that are likely to be deployed by a newly emerging nuclear power may lack this ability. While the two superpowers had the scientific and economic resources to consider mobile-basing, hardened silos, and sea-based weapons, new forces are likely to be a good deal more vulnerable. They are also far less likely to be subject to the same detailed and stringent command and control systems that the superpowers employed. The net effect is that the nuclear forces of emerging proliferators will most likely be unable to guarantee an assured second strike. In these cases, the introduction of nuclear weapons may well make any local rivalries considerably less stable. When war between two antagonists becomes a possibility, there will be a strong incentive for either side to pre-empt the other. The side that is the target of vulnerable nuclear forces has an incentive to destroy them before they are used, while the side possessing the vulnerable forces has an incentive to use them before they are destroyed. Each antagonist fears these types of calculations by the other, and will be driven by the crisis and the advantages of pre-emption to take the initiative and escalate the conflict.

Similarly, stability between the superpowers rested on a set of de facto rules and procedures learned slowly over time—a learning process that captured both governments' interests after the Cuban missile crisis of 1962 (Nye 1992, 8-9). New nuclear weapons states will not have had the benefit of such a learning period. The Soviet Union and the United States had no common borders, had no previous history of warfare against one another, and had no disputed territorial claims that threatened the political or national survival of either country. This situation stands in stark contrast to the regional contexts that are likely to host future proliferation. In many of these cases (South Asia, the Middle East, and the Korean Peninsula), the presence of common borders and territorial disputes means that limited crises could quickly escalate to place national core values at stake. In such crises, the use of nuclear weapons becomes far more conceivable. Rather than the steady and mutual deployments characteristic of the superpower arms race, these regional rivalries are likely to display more explosive proliferation, giving their antagonists far less scope for mutual nuclear learning (Dunn 1991, 25). Compared to the superpowers, these nations may have less flexibility to manage and successfully contain a nuclear crisis. They may not know if their opponent's operational procedures signal an intention of war or peace; they may be less aware of the technical requirements of deterrence, and they may not fully understand the risks of nuclear war.

The claim that nuclear proliferation is potentially in the U.S. interest and requires no policy response, therefore, should be treated with caution. Indeed, there is considerable reason to believe that the introduction of nuclear weapons into some regions may be destabilizing, not only increasing the probability of regional conflict, but also adding immeasurably to its destructiveness. Given a general U.S. national security interest in a stable global order, and a more humanitarian interest in preventing global suffering and destruction, U.S. policy makers are right in continuing to express concern about further nuclear proliferation. What of the specific case of South Asia? Is this a region prone to crisis instability? Should the United States be concerned about proliferation in this context? As we shall see, the current situation in South Asia is indeed one that should worry U.S. national security managers. Despite the claims of academics such as Waltz, it is a situation that justifies a U.S. policy response.

# NUCLEAR PROLIFERATION: THE CASE OF SOUTH ASIA India and Pakistan: Regional Rivals

India and Pakistan have been rivals since the creation of Pakistan during India's partition in 1947. Pakistan was born out of the notion that Hindus and Muslims were not only two separate peoples, but also two separate nations (Varshney 1991, 999-1000). In forming a separate Muslim country, Pakistani nationhood centered around a continuing fear of Hindu dominance and a struggle for independence. India, on the other hand, never accepted the two-nation theory. From the time of independence, the Indian nationalist movement espoused a concept of India that was incompatible with this type of religious separation. The core of Indian identity is a secular vision of a nation in which people of many different beliefs and religions can live together in peace and harmony. The formation of Pakistan represented a direct challenge to this vision; it was a rebuttal and a threat to the secular consensus which formed the basis of Indian nationhood. In addition, the formation of Pakistan conflicted with the dominant Indian view of the sub-continent as a single strategic unit, united by geography and culture. Since the moment of partition, Pakistan has been viewed as a villain—a nation that has shattered the unity of the continent, spread discontent and conflict, hindered India's legitimate peace-keeping role in the region, and served as a conduit for outside interference and troublemaking (Tanham 1992, 132-133).

With the core values of each nation at such odds, it is little wonder that these two nations have had difficulty getting along amicably. Since 1947, India and Pakistan have fought three wars: two over Kashmir, a mainly Muslim province that is currently part of India, and a third which resulted in the fragmentation of Pakistan and the creation of Bangladesh. They have come perilously close to conflict on a number of other occasions. In the winter of 1986-87, India conducted an unexpected series of exercises on the Pakistani border called "Operation Brass Tacks." Pakistan reacted, and over 300,000 Indian and Pakistani troops were engaged in a tense stand-off along their mutual border. A full scale war was narrowly averted only through an intense series of negotiations (Isphahan 1989/90, 33). The two nations have also been engaged in an ongoing conflict since 1984 along the Siachen glacier, located where their borders converge with those of China, Afghanistan, and Tajikistan. Hundreds of troops have died in this particular conflict, and artillery fire is exchanged almost daily (UPI 4 November 1992). Where tensions are highest at present, however, is in the province of Kashmir.

#### Kashmir

As mentioned, Pakistan was created from the idea of a separate Muslim nation. During the partition, Pakistani leaders expected Kashmir to become part of this new nation. Indeed, the name "Pakistan" was an acronym for the majority Muslim areas of the old Indian union: *Punjab*, the Afghan border, Kashmir, Sind, and Baluchistan (Joeck 1986, 80). When the Hindu prince of the province hesitated to join, Pakistan sent thousands of armed infiltrators into the region, causing the prince to merge the province with India in 1948. India and Pakistan have since fought two wars over the province, one in 1948 and the other in 1965. The first war left one-third of Kashmir under Pakistani control before the United Nations ordered a cease-fire. The second war ended in a stalemate.

The future of the province is a highly emotional issue for both nations, and one on which neither is willing to give much ground. For Pakistan, a country of different ethnic groups held together by the common idea of Muslim nationhood, the continuing presence of Kashmir within India is a betrayal of the national ideal. A Pakistani government cannot give up its claim to Kashmir without alienating itself from this ideal. Such a move would certainly damage the standing of the government, adversely affect its efforts at nation-building, and possibly threaten the central consensus that holds Pakistan together. On the other side, India cannot give up its claim to Kashmir without inflicting similar damage on its underlying national identity. The loss of Kashmir would bring into question the idea that different religions and peoples can indeed live peacefully within the Indian union. It would fuel other separatist movements such as the Sikh movement in Punjab, and it would confirm the claims of Hindu nationalists, an increasingly important political force, that members of the Muslim community have divided loyalties and that India should move towards Hindu majority rule. It is feared that the loss of Kashmir, to the extent that such a move would threaten the survival of the secular constitution, would worsen communal tension within India, possibly to the degree experienced during the 1947 partition. The experience of 1947 is still a key feature in the minds of many Indian policy makers as an event in which Hindu-Muslim violence killed over half a million people and tore the nation apart (Varshney 1991, 1002).

Since 1990, this issue has become more emotionally charged for both sides. Following the killing of 35 unarmed Muslim demonstrators by Indian security forces in January 1990, the simmering Muslim separatist movement in Kashmir flared into a widespread popular insurrection. Between one and two thousand people have died in Kashmir due to political violence, and there have been numerous reports of human rights violations, both by Indian security forces and by Muslim extremists who have forced almost all of the Hindu population to leave. Arguing that fellow Muslims are being kept within a Hindu state by force, Pakistan has given political support and may have provided arms and training to the insurgency. Pakistan has denied the latter accusations by claiming that armed support is the action of private individuals which it is powerless to prevent. India, fearing the loss of the province, has stepped up its security presence in the valley and has taken an even more hard-line stand on the issue, with Prime Minister Rao declaring that "no force on earth can alienate us from it." (UPI 15 August 1992) Mutual recriminations and threats over Kashmir have become commonplace, and a number of commentators describe it as an issue that could easily tip the region into armed, maybe nuclear, conflict (Jones 1992, 113).

#### Nuclear Capabilities

Foreign experts now generally agree that both India and Pakistan have the basics of a small, militarily significant nuclear force, i.e., they both have the components necessary to assemble a number of warheads, perhaps within hours, as well as the ability to deliver them against each other.

India: The Indian nuclear weapons program is based primarily on early generation fission bombs made from plutonium. Although a number of India's reactors are subject to International Atomic Energy Agency (IAEA) safeguards, there are several that are free from such restrictions. The plutonium produced in these reactors is therefore free to be used as fissile material for nuclear warheads. It is estimated that by the end of 1995 India could have a stockpile of around 400 kilograms of plutonium, or enough material for about 65 weapons (Albright and Hibbs 1992a, 29).

India decided to pursue a nuclear weapons capability in the mid-1960s, largely in reaction to its humiliating defeat by China in 1962, and the first successful Chinese weapons test in 1964. In 1974, India conducted its first test, claiming that it was a "Peaceful Nuclear Explosion" (PNE) with no military significance. From that point, India has pursued a policy of deliberate nuclear ambiguity, insisting that it has not produced any nuclear weapons, but maintaining that it has a sovereign right to do so. Although the initial decision to branch into weapons research may have been a response to the Chinese program, the clamor for an Indian bomb following the 1964 Chinese test was short-lived. Since then, India's concealreveal handling of its nuclear "option," and the debate over the merits of weaponization, have been largely reactions to revelations of Pakistan's nuclear weapons program (Seth 1988, 712). In 1987, as a result of Pakistani disclosures of its nuclear capabilities and confirmations by the foreign press, the Indian Defense Minister argued that "the emerging nuclear threat to us from Pakistan is forcing us to review our options." (Seth 1988, 712) Since then, it has been widely accepted that India has prepared at least the components of a number of weapons which could be assembled and delivered quickly. For example, former CIA Director Robert Gates reported in January 1992 that India had weapons that "could be assembled quickly" and the Indian Foreign Minister in February 1992 stated that "A bomb is part of defense preparedness. We have defense preparedness." (Albright and Hibbs 1992a, 27)

At present, such nuclear weapons will probably have to be delivered by modified high-performance aircraft such as the Mirage 2000 or the MIG-23. India, however, is also currently working on missile-based delivery systems. It successfully tested the Agni in May 1989, an intermediate range ballistic missile with a range of 1550 miles which is more than capable of carrying a nuclear warhead. Another test to increase its payload capability was scheduled for March 1993. India has also successfully developed the Prithvi, a short range nuclear-capable missile that can be used against strategic targets in Pakistan. This system is expected to enter full scale production this year (UPI 3 January 1993).

**Pakistan:** The Pakistani nuclear weapons program centers around early generation fission weapons which use Highly Enriched Uranium (HEU) as fuel. It is believed that by 1992 Pakistan had produced between 100 and 200 kilograms of weapons grade uranium, enough material for approximately 6 to 13 weapons (Albright and Hibbs 1992b, 42).

The Pakistani government decided to develop a nuclear weapons program after its 1971 war with India, a war that resulted in the dismemberment of Pakistan and the creation of Bangladesh (Seth 1988, 712). That war reinforced Pakistani fears of Indian opportunistic aggression and emphasized Pakistan's vulnerability to Indian conventional military might. The nuclear option was seen as a way of dealing with this threat. The weapons program was also substantially accelerated after India's test in 1974. Like India, Pakistan has aimed for a posture of designed ambiguity. While insisting that its nuclear program is entirely peaceful, Pakistan has nevertheless ensured that the world is aware that it too has a nuclear weapons "option." In 1984, the head of Pakistan's enrichment program openly stated that Pakistan could build nuclear weapons if called upon to do so, and in 1987 the President of Pakistan himself declared that "Pakistan had the capability of building the bomb." (Carnegie Task Force 1988, 18) These claims have been largely substantiated by the assessments of other countries. The U.S. State Department reported through the 1980s that Pakistan had tested a number of weapons-relevant explosive and triggering packages, and that it had received a proven warhead design from China, based on the weapon exploded in China's fourth test in 1966 (Albright and Hibbs 1992b, 42). A U.S. intelligence assessment published early in 1992 concluded that the country had enough material to make ten nuclear weapons (Mann 4 December 1992, 1), and in December 1992, Senator Larry Pressler claimed that Pakistan had at least seven nuclear weapons that could be assembled and dropped within hours (Chicago Tribune 2 December 1992, 2).

Like India, Pakistan is also working on delivery systems but at the moment must rely on the use of modified high-performance aircraft (such as the F-16 and the Mirage-V). Although its missile program is significantly behind that of India, there have been recent reports that Pakistan has received a number of Chinese M-11 missiles, which have a range of around 400 kilometers and are capable of carrying nuclear warheads (Mann 4 December 1992, 1).

The United States is thus faced with a new and challenging situation. While it had hoped that its earlier non-proliferation efforts would prevent additional nations from acquiring nuclear weapons, such hopes have been dashed in the case of South Asia. U.S. policy must now address the proliferation that has already taken place. While still unconfirmed, there is considerable evidence to suggest that both India and Pakistan have the means to build quickly a number of nuclear warheads and deliver them against each other.

#### **Regional Nuclear Stability**

Is this a cause for concern? We have seen that regional nuclear balances may be less stable than the superpower balance of the Cold War and may adversely affect U.S. interests. Is this the case in South Asia? This essay will argue that the regional balance between India and Pakistan is particularly unstable and that it justifies a U.S. policy response.

Stable deterrence requires that both antagonists expect nuclear aggression to be met immediately with an unacceptable retaliation, i.e., it requires an assured second strike. Unlike the situation that existed between the

superpowers for most of the Cold War, this assured second strike cannot be taken for granted in South Asia. First, the fact that both nations maintain covert weapons programs presents a considerable problem for deterrence stability. To successfully deter an adversary, a state must be able to effectively communicate its willingness and ability to retaliate in a way that makes aggression unambiguously unprofitable. By keeping nuclear forces secret, each nation introduces an extra degree of uncertainty about its ability to carry out its deterrent threats. Thus, a rival country may consider using nuclear weapons, thinking that it can escape retaliation. Such a situation certainly detracts from deterrence stability. Uncertainty and ignorance about the other's nuclear forces may also feed misperceptions of its intentions during a crisis. Ambiguity and doubt about the capabilities of a rival may breed excessive and destabilizing "worst case" assessments of its first strike potential and designs. With this type of planning, each side becomes more inclined to consider pre-emption, hoping to minimize the damage from what it mistakenly sees as an imminent or probable attack. Furthermore, uncertainties about the capabilities of an adversary, when combined with this worst case planning, may also provide added impetus for explosive and perhaps destabilizing arms racing. One example is the hysteria in the United States during the 1950s in response to a misperceived bomber and missile gap (Burns 1991, 92).

Second, technical features of Indian and Pakistani nuclear forces make an assured second strike unlikely. During the Cold War, the superpowers spent countless billions of dollars on the survivability of their forces and command structures, ensuring that their ability to retaliate with nuclear weapons was demonstrably impervious to any type of aggression. These resources will probably be unavailable to India and Pakistan. As mentioned, both sides at present rely on aircraft to deliver their nuclear weapons, leading to a particularly unstable situation. For the nation that has a disadvantage in airpower, in this case Pakistan, there is no guarantee that its planes will be able to penetrate the defenses of an alert defender. Pakistan also may lack the wherewithal to prevent India from disabling its airfields or destroying its planes. A disarming strike by India, therefore, must be considered a possibility. If Pakistan considers the possibility great enough, it may be tempted to pre-empt this strike to avoid losing its nuclear capability. India will be aware of such Pakistani fears and thus will have to consider heading off this pre-emption, and so on. In addition, the planes that deliver these weapons have a dual purpose. They are also useful in a purely conventional war. For Pakistan, therefore, a conventional conflict with India will rapidly present it with an uncomfortable choice. As the crisis continues, it may find itself losing the very aircraft it needs to be able to launch a nuclear attack. Pakistan will have to decide whether to accept a conventional defeat and the possibility of nuclear blackmail, or exercise its nuclear option very early in the crisis. Given the secrecy surrounding the

nuclear capabilities of both sides, India may have no way of knowing just where this decision point is, and may therefore unwittingly drive Pakistan into making such a choice, mistaken in the belief that the crisis could be contained at a purely conventional level.

Finally, the relationship between India and Pakistan is much different than the relationship between the superpowers during the Cold War era. The superpowers had no previous history of major conflict prior to the Cold War, had no common borders, and had no pressing dispute in which the stakes were so high as to directly threaten the national survival of both. The two were thus better able to avoid crises, and when crises did occur, the superpowers had more scope to make concessions so as to ensure that they did not escalate out of control. India and Pakistan are not so fortunate. They share a common border, maintain a number of territorial disputes, have a history of mutual suspicion, conflict, and hostility, and are engaged in an argument that has implications for the core values of each nation. For these two, therefore, crises are much more likely to occur, and when they do, their leaders are much less able (or willing) to defuse them quickly. In addition, unlike the superpowers, who had up to half an hour to determine if an attack was in progress, the proximity of India and Pakistan makes each country more likely to adopt "hair trigger" launch-on-warning postures during such a crisis. When combined with the above mutually recognized incentives for pre-emption, the possibility that misperceptions, accidents, and false alarms will tip that crisis into a nuclear conflict are much greater.

So what should the United States do? While it may have done everything it could to prevent the current situation and while it may prefer a nuclear free South Asia, that time is gone. The weapons are there. The United States has a general interest in ensuring that South Asia remains as stable and conflict-free as possible. It must, therefore, direct its policy towards ensuring both that the number of crises confronting the region are as few as possible, and that the likelihood of such crises escalating into nuclear conflict is as low as possible.

#### **Deteriorating Relations**

Events over the last half of 1992 do not give much grounds for an optimistic assessment of South Asia's immediate future. Hindu-Muslim relations within India, which were already strained over the last year, have taken a dramatic turn for the worse. Following the destruction of a mosque in Uttar Pradesh by Hindu nationalists in December, India was swept by a wave of riots and sectarian violence that left over 1500 people dead (UPI 15 December 1992). Sporadic violence still occurs, and an additional 500 people have been killed since the riots were brought under control towards the end of December. This violence, an illustration of just how fragile the secular Indian national identity is, gives a small taste of what is in store should the national consensus fail and makes internal unrest the primary Indian national security threat. It is thus likely to make Kashmir more important than ever. Earlier this year, India moved an extra three divisions of troops from the Chinese border to the Kashmir frontier in an attempt to restore order and prevent trans-border infiltration (UPI 30 December 1992). It also threatened that if Pakistan did not stop aiding the Kashmiri insurgents, it would "teach a lesson to Pakistan that not only its present generation but future generations would also remember." (UPI 3 September 1992) Such rhetoric is indicative of a general decline in Indian-Pakistani relations over the last year. Last December, India and Pakistan engaged in a series of expulsions of each other's diplomatic staff (UPI 29 December 1992), leaving their bilateral relationship at the lowest point in years. If the United States is to do anything to help avoid a regional conflict in South Asia, it should do it now.

# U.S. ACTION: DIPLOMACY

Until the 1980s, U.S. non-proliferation policy was based on the premise that nuclear proliferation was driven by technological momentum. Once nations acquired nuclear technology, they would progress inevitably to the manufacture of weapons. Anti-proliferation policy, therefore, centered around the tight control of nuclear technology by the advanced countries of the north. Export controls, technology denial, and international safeguards aimed to solve the proliferation problem by preventing additional nations from acquiring the components, materials, and technological ability to build nuclear weapons. This view gradually changed, however, as weapons technology matured, as an increasing number of states with the ability to build weapons decided not to do so, and as states which were denied technology nonetheless proceeded with weapons programs.

Throughout the 1980s it was increasingly recognized that proliferation was at its core a political problem. Nations make the decision to acquire nuclear weapons in response to their perceived security position. The only anti-proliferation measure that has any chance of success in the long run, therefore, is an accommodation between regional rivals that leaves them more secure, and which thus removes their underlying motivation for having nuclear weapons in the first place. This essay argues that such an approach is appropriate not only for pre-proliferation policy, but that it is also doubly appropriate for dealing with a region in a post-proliferation situation. In the case of South Asia, U.S. policy should continue to encourage such an accommodation between the nuclear rivals. This accommodation would lower the level of mutual fear and suspicion, increase the chance that crises would be defused before they escalate into nuclear conflict, and reduce the motivations each might have for further proliferation, either by acquiring greater numbers of warheads or developing more sophisticated weapons. A major feature of U.S. post-proliferation policy in South Asia, therefore, should be a concerted diplomatic effort to defuse tensions between India and Pakistan and promote peaceful regional coexistence.

#### The Five Power Conference

U.S. diplomatic officials have already been quite active in this regard by proposing a Five Power Conference on regional nuclear arms control. This conference would include India, Pakistan, China, the United States, and Russia and would serve as a forum for the discussion of ways to stem nuclear rivalry on the subcontinent. The inclusion of China is seen as vitally important, since India has traditionally argued that its nuclear "option" is concerned not only with a threat from Pakistan, but also with the nuclear capabilities of China (Chellaney 1991, 49-51). Previous proposals for a Nuclear Weapon Free Zone in South Asia have generally been rejected by India on the grounds that any regional arrangement that excluded China would be artificial and would leave the region open to Chinese hegemony (Vanaik 1987, 71). The conference would serve as a vital first step in building a closer, more stable relationship between India and Pakistan. First, it would facilitate discussions on mutual security concerns that could help reduce tensions and bring bilateral relations out of their current slump. Second, it would serve as a venue in which the two nations could negotiate mutually acceptable measures to head off further nuclear arms racing and stabilize the nuclear balance. Finally, it could serve as the beginning of an ongoing dialogue between the two countries on regional security. This dialogue might then guide both nations in the successful management of future crises, so as to prevent them from getting out of control. Crisis instability is reduced when the various informal rules and procedures for defusing a crisis are worked out before that crisis actually takes place.

The idea for such a Five Power conference was enthusiastically endorsed by Pakistan's Prime Minister in June 1991, and both China and Russia have agreed to attend. Only India has rejected the idea. Given that the inclusion of China addresses India's traditional objections to such South Asian talks, its present position is all the more puzzling. While India has steadfastly maintained that it cannot assure nuclear disarmament outside of a general and globally applicable treaty, there nevertheless seems to be no reason why it cannot at least attempt to remedy some of its more immediate stability problems with Pakistan. Some commentators have suggested that Indian intransigence reflects the poor state of Indian-Pakistani relations, combined with the perception of the conference as a Pakistani initiative (MacFarquar9 March 1992, 42). If indeed this is the only objection, then there may well be a role for the United States in providing a gentle diplomatic "push" at least to get India to the table.

### A Policy Mistake—The Isolation of Pakistan

U.S. diplomatic engagement in the region requires the ability to talk with both sides, bring Pakistan and India together in negotiation, provide a mediator/broker service to the contending parties, and propose constructive solutions without being suspected of undue bias. Current U.S. policy towards Pakistan and India, however, may prevent the United States from being able to do these things effectively.

With the withdrawal of the Soviet Union from Afghanistan, and the end of the Cold War, the 1990s have seen a dramatic shift in U.S. regional foreign policy—a shift that has been dubbed the "quiet revolution" by Pakistani security planners. U.S. diplomats have made a concerted effort to improve relations with India and have radically cooled relations with Pakistan, the principal U.S. ally in the previous regional struggle against Soviet expansion. For India, the new relationship has been characterized by the opening of economic and trade opportunities as well as by the formation of a new strategic alliance under the "Kicklighter proposals." These proposals call for extensive cooperation and joint training of the U.S. and Indian militaries, going well beyond the 1971 Indo-Soviet Treaty of Peace and Friendship (Bidawi 20 January 1992). For Pakistan, the new relationship has meant increasing confrontation. Throughout the 1980s, the United States provided Pakistan with billions of dollars of economic and military aid. Although a number of Congressional amendments to the Foreign Assistance Act threatened this aid because of Pakistan's nuclear weapons program, their requirements were waived by Presidents Reagan and Bush in the interests of U.S. national security. In October 1990, President Bush refused to certify that Pakistan did not "possess" a nuclear explosive device as required under the Pressler Amendment. An automatic aid cut-off placed all previous aid on hold and finally terminated it in October 1991. Since then, U.S.-Pakistani relations have become increasingly distant, with the United States insisting that a restoration of aid is only possible if Pakistan's weapons capability is dismantled.

This abrupt cut-off in aid, and the subsequent inflexibility of the U.S. stance, is largely the product of select U.S. policy makers' frustration with the continuing Pakistani weapons program (United States Senate 9 October 1990), together with a belief that this program can be stopped with enough U.S. pressure (see the recommendations of the Carnegie Task Force 1988, 114-115). There is reason to doubt, however, that any amount of U.S. pressure could force Pakistan to give up its nuclear deterrent. On the contrary, by stopping shipments of needed conventional military supplies, radically reducing the prospect of U.S. assistance during a crisis, and aligning itself with Pakistan's principal rival, the United States may well be forcing Pakistan to rely even more heavily on its nuclear forces. The Pakistani nuclear weapons program has long been associated with the nation's independence and sovereignty and is popular domestically. In a

Gallup poll held in Pakistan in June 1991, 77 percent of the respondents favored rejection of U.S. aid over giving up the nuclear program, and 87 percent were in favor of Pakistan developing nuclear weapons (Kahn 1992, 205). By insisting on the unilateral disarmament of Pakistan—a measure that the United States has not yet considered for itself despite its more favorable security position—the United States policy may only serve to increase anti-Americanism within this Muslim country, and so strengthen popular support for an independent nuclear force.

There is also a feeling within Pakistan that the U.S. approach in pursuing non-proliferation has been highly discriminatory. The imposition of sanctions against Pakistan and the favorable diplomatic shift towards India, which has already tested a nuclear weapon and which by all accounts has a greater weapons potential, may confirm this. In addition, the United States' excessive and uneven concentration on Pakistan's program may reduce India's incentives for entering into meaningful regional security discussions. India has few reasons to enter into an arms control agreement with Pakistan if it thinks it can avoid making concessions by relying on the United States to slow down the Pakistani program on its behalf (Carnegie Task Force 1988, 72).

One possible example of this problem is the current deadlock over a regional moratorium on weapons material production. This proposal was putforth by the Carnegie Task Force on Non-Proliferation and South Asian Security as a valuable and eminently achievable first step towards regional stabilization. While Pakistan may have been predicted to be less enthusiastic about this proposal because it would have locked the country into a position of strategic inferiority, it surprisingly announced that it had unilaterally frozen its nuclear weapon program in 1991. U.S. intelligence confirmed that the freeze extended to the enrichment of uranium and the shaping of this material into weapons cores (MacFarquar 9 March 1992, 42). When pressed by U.S. officials in November 1992 to respond in kind and join a regional production freeze on weapons grade material, India once again refused to enter into any kind of regional negotiations.

It would seem, therefore, that a more even-handed approach is required. The current U.S. stance in the region, and especially its increasing isolation of Pakistan, may hinder U.S. efforts to encourage greater dialogue and stabilization between the two rivals. By stripping Pakistan of U.S. security assistance, and by aligning itself with Pakistan's main rival, the United States may well be removing the last of that nation's incentives for nuclear restraint. An isolated Pakistan, facing a looming Indian threat without the support of a superpower ally, may have to look for friends elsewhere. Encouraged by growing anti-Americanism within its own population, it might seek these friends in the Muslim Middle East. The price of acceptance may well be the transfer of nuclear technology. By the same token, as a nation on the receiving end of U.S. sanctions and hostility, Pakistan may adopt a siege mentality and become less willing to engage in dialogue or accept compromise. It will certainly be less receptive to proposals from the United States. While the United States is right to express its displeasure at developments that it sees as destabilizing for the region and for the world as a whole, it should also take care to express appreciation for positive initiatives by either nation which enhance regional stability. The United States should also make sure that it is seen as treating both sides equally, or at least fairly. This may mean being less tolerant of Indian unwillingness to at least sit down at the negotiating table. If the United States continues with its current policy, it may have considerable difficulty playing a positive diplomatic role in the region. Accusations of bias could undermine the U.S. role as a mediator and foster suspicion of U.S. proposals.

To the extent that the damage has already been done, the United States may have to combine its diplomatic efforts with those of other powers. While U.S. credibility has generally been low within both countries in the region, the credibility of another power such as France may be higher. Japan could also be included in a joint diplomatic effort to stabilize the region. Japan has direct interests in the stability of Asia, has unilaterally denounced the possession of nuclear weapons, and has considerable economic and technological leverage over both countries. This particular issue, therefore, might afford an ideal opportunity for Japan to take a more active diplomatic role in world affairs. By working with other powers, the United States not only increases the resources at its disposal, but also the moral pressure on both India and Pakistan to negotiate in good faith. When both parties become aware that their situation is a matter of concern to the entire world, not just to a single power, they might be more inclined to resolve their differences without resorting to force.

## U.S. ACTION: TECHNICAL ASSISTANCE Confidence Building Measures: Verification

While U.S. officials can bring the parties together and propose any number of viable arrangements, the principal barrier to the adoption of regional arms control or crisis stabilization measures is a lack of mutual trust. By providing each party with the technical means to verify that the other is not cheating on an arrangement, the United States can ensure that this lack of trust presents as small a barrier as possible. Such technical assistance can take various forms depending on the particular arrangement in question. In the case of a negotiated withdrawal and demilitarization of a border area, the United States may be able to help India and Pakistan set up a network of remote unmanned sensors capable of alerting them of suspicious movements by the other side. This type of technical assistance was provided by the United States to facilitate the IsraeliEgyptian Sinai Disengagement Agreement of 1975 (Burns 1991, 101) and may be useful in helping India and Pakistan negotiate a mutual withdrawal from the Siachen glacier, an inhospitable region where manned third-party peacekeeping missions may be inappropriate.

Intelligence resources are another possible form of verification assistance. Specifically, Washington might consider providing India and Pakistan with the requirements for a satellite verification regime. The use of satellite image verification can be part of any number of stabilizing agreements, including: maintenance of demilitarized zones, elimination of nuclear missiles deployed within a certain distance of the border, quantitative or qualitative arms limitations, and moratoriums on fissile material production. The imaging services necessary for many of these agreements are commercially available, but they are expensive. The United States, therefore, should consider subsidizing these services and providing technical expertise to help develop an appropriate and adequate imaging package.

A number of agreements, however, such as one limiting the production of nuclear weapons components, require a level of sophistication in satellite imaging that is not available commercially. In this case, the United States might want to consider selling or giving a modified military satellite to either or both of the parties (Gupta 1991, 252). The United States has already seriously considered selling a military satellite to the United Arab Emirates to improve stability in the Persian Gulf (UPI 18 November 1992), so this type of policy initiative is not entirely unprecedented. Even if it cannot provide the region with one of its military satellites, the United States might still provide India and Pakistan with the imaging data required to support a regional agreement. This type of assistance has been provided before, in a number of different situations. The Sinai agreement, for example, included weekly overflights by U.S. SR-71 reconnaissance aircraft that relayed the resulting information directly to Israel and Egypt (Burns 1991, 102). The United States has also provided imagery to Israel, England, and Canada, and more recently, to both Pakistan and India in order to avert a crisis over Kashmir in 1990 (Gupta 1991, 252). The United States might even reconsider the establishment of an international global satellite verification system, perhaps under the auspices of the UN. The idea of the International Satellite Monitoring Agency (ISMA) has been discussed since 1961 and was shown to be viable in a UN study conducted in 1982 (Ali 1991, 281). Perhaps it is time for Washington to put its weight behind such a proposal.

#### **Enhancing Stability**

While the above technical assistance may ensure that India and Pakistan can enter into confidence building and arms control agreements, thus enabling them to reduce the level of bilateral tension and avoid crises, their nuclear forces are still configured in a way that makes any crisis potentially unstable. The United States might therefore also consider transferring technology that limits the possibility of accident or unauthorized launch, and reduces the incentives for pre-emption.

First, South Asia has the unenviable distinction of being the region with the highest incidence of terrorism in the world. Given that both Pakistan and India suspect each other of supporting their respective insurgencies, the threat of nuclear terrorism in this region is more likely to lead to interstate conflict. It is thus in everyone's interest to ensure that the scope for theft and/or use of nuclear weapons is minimized. To this end, the United States should consider providing the technical assistance and expertise necessary for Pakistan and India to establish proper physical security and anti-terrorism safeguards wherever they produce, store, and transport their weapons materials. At the very least, the United States should push both India and Pakistan to ratify the Convention on the Physical Protection of Nuclear Material, specifically designed to deter international nuclear terrorism (Chellaney 1991, 328). The United States might also help both nations establish the equivalent of the Department of Energy's Nuclear Emergency Search Teams (NEST), groups of specialists trained to find and render harmless stolen weapons, improvised nuclear devices, or weapons-grade material.

Second, and perhaps more open to debate, the United States might consider transferring technology that makes Indian and Pakistani arsenals less susceptible to accidental detonation. This technology might range from the manufacture of insensitive high explosives to the promotion of "safe" weapons design. Recent revelations show that the United States transferred such technology, albeit covertly, to the French throughout the 1970s and 1980s (Ullman 1989, 3-33). There may be an equally pressing reason for transferring such technology to India and Pakistan: in order to move their nuclear programs to a more secure and stable level. Similarly, the United States may want to transfer technology and expertise that can eliminate unauthorized use of Indian and Pakistani weapons. Such technical assistance may be in the form of "Permissive Action Link" (PAL) technology, i.e., coded electromagnetic locks for nuclear weapons, or information on human reliability testing, or the concepts behind sensor switches (safeguards that ensure that a bomb is in free-fall or that a missile is in flight before a weapon is armed).

The reason such assistance may prove to be controversial, however, is that it could be argued that it enhances the nuclear capabilities of the recipient. It may be impossible, for example, to transfer U.S. knowledge on weapons safety without also giving the recipient certain insights into warhead design that the state might otherwise not have known. Similarly, by passing on PAL technology, the United States could be improving the recipient's ability to command its nuclear forces during war.

It would not be difficult to argue that such assistance directly violates U.S. obligations under the Nuclear Non-Proliferation Treaty (NPT) of 1968. Article I of that treaty states clearly that the United States should not "transfer to any recipient whatsoever nuclear weapons or other nuclear devices or control over such weapons or devices directly, or indirectly; and [should] not in any way assist, encourage, or induce any non-nuclear State to manufacture or otherwise acquire nuclear weapons or devices, or control over such weapons or devices." This U.S. assistance could also damage the international norm against nuclear possession and proliferation in that it helps to legitimize the acquisition of nuclear weapons by a new state. The risks, uncertainties, and dangers of possessing nuclear weapons, it is argued, are perhaps the most important disincentive to weaponization. By stepping in and managing those risks, the United States is accepting a proliferator as a legitimate nuclear weapons state and is removing a major obstacle for the next potential proliferating nation who may be considering crossing the weapons threshold.

Finally, and more selfishly, it should be pointed out that the enhancement of another nation's nuclear capabilities may not be in the direct interest of the United States. As the Iranian revolution has shown, weapons have a tendency to outlast the government they were intended to support. Today's friend may be tomorrow's enemy, and it may not be in the U.S. interest to have this new enemy armed with nuclear weapons enhanced by U.S. technology. This argument, therefore, suggests a broad rule of thumb to guide policy decisions on which technology to transfer and which to retain. The United States should not pass on any stabilizing technology that it would not also give to a hostile nuclear rival. Under this criterion, certain PAL technology probably would be acceptable, while a hardened command, control, communications, and intelligence network would not. Broad concepts of weapons safety would be acceptable, but the detailed design of a safe warhead would not. By following this broad guideline, the United States will be less vulnerable to critics who argue that it is directly adding to the threats which confront it and that its transfer of technology may serve to make the recipient's neighbors less secure. Since it would preclude the transfer of technology that directly or indirectly augments another nation's offensive capabilities, this rule would also make the United States less open to criticisms that it was violating the NPT by enhancing the weapons capabilities of proliferating states.

The criticism would remain that the transfer of stabilizing technology damages the international norm against nuclear weapons possession and proliferation and legitimizes the weapons program of a proliferating state. This is certainly a valid point, and the decision to deal pragmatically with an emerging nuclear weapons state may not be an easy one. The global norm that the United States wants to preserve, however, is one that denies that global nuclear proliferation is inevitable. While efforts to stabilize the

arsenals of Pakistan and India may indeed hurt this norm, what would be the effect should a nuclear war break out between the two? It is possible that the world would recoil in disgust and abolish such weapons once and for all. The continued production of chemical weapons after World War I, however, suggests that this may be wishful thinking. Instead, it is likely that the use of nuclear weapons in South Asia, particularly if used in a "successful" first strike, will shatter the nuclear taboo forever. Once the world witnesses the use of nuclear weapons, there may be more states looking to acquire the ability to deter such use against themselves. As all these states look to nuclear deterrence, the view could set in that worldwide proliferation may be only a matter of time. A norm that views universal nuclear armament as inevitable will almost certainly become self-fulfilling. Therefore, while agreeing that the transfer of stabilizing technology to South Asia entails a certain cost, this essay takes the position that the costs of an actual nuclear conflict between India and Pakistan would be even greater. As we have already seen, the risks of this conflict are frighteningly high. High enough, perhaps, to justify such a policy.

# **U.S. ACTION: ARMS CONTROL**

Given that its efforts to stabilize the South Asian nuclear balance may erode the international norm against proliferation, the United States should seek other means of strengthening that norm and reducing the long term prospects for global nuclear proliferation. There are two main areas in which the United States can act: the promotion of a Comprehensive Test Ban and the move to further arms reductions.

#### A Comprehensive Test Ban Treaty

The anti-proliferation regime rests upon a few core features. The most important of these is the Nuclear Non-Proliferation Treaty (NPT) of 1968. In this agreement, the non-weapons states promise not to acquire nuclear weapons and to keep their nuclear facilities under the safeguards of the IAEA in exchange for access to civilian nuclear technology from the nuclear weapons states. In addition, they receive an obligation from the weapons states that they will pursue negotiations among themselves in good faith with a view to arms control and early general disarmament. It is this latter obligation, spelled out in Article VI of the treaty, that has proven to be the biggest issue of contention between the large weapons states and the non-weapons states. Whenever the treaty has come up for review, it has been argued, with some justification, that the weapons states have not kept their promise, and instead have engaged in an arms race that puts the future of the planet at risk.

The NPT comes up for review again in 1995. At this conference, however, it will be decided whether or not the Treaty should be extended,

either indefinitely, for a limited period, or not at all. To ensure the extension of the NPT, the United States must demonstrate that it has fulfilled its obligations under Article VI. A vocal group of treaty members, led by Mexico, has made it clear that this requires the completion of a Comprehensive Test Ban (CTB) (Strategic Survey 1992, 205). Therefore, if it wishes to ensure the extension of the NPT and maintain the international antiproliferation norm, the United States should sign a CTB treaty.

Not only would a U.S. signature on the treaty immeasurably strengthen global anti-nuclear sentiment, but it would also help stabilize directly the regional nuclear balance in South Asia. India's position has objected to a regional nuclear test ban because it would be discriminatory in allowing the existing nuclear weapons states freedom to do as they please. India has maintained, however, that it would sign a test ban treaty if it were universally applicable to all states. This position was reiterated on January 11, 1993 (UPI 11 January 1993). Pakistan is willing to sign any arrangement, regional or global, as soon as India does. The United States is now presented with an opportunity to lock the South Asian rivals in at a relatively low level of proliferation. Although testing is not essential for a nation to be able to build an early generation weapon, a test ban nevertheless does represent a significant constraint on any weapons program. It prevents more advanced proliferation, such as the development of smaller, more powerful, or tactical weapons. It also almost certainly precludes a nation from developing thermo-nuclear weapons. The United States, supported by Britain, is currently the main obstacle to the adoption of a CTB. It could easily agree to a test ban by supporting an amendment of the Partial Test Ban Treaty of 1963, as proposed during a special UN conference in January 1991. Even the former Soviet Union unilaterally declared in 1991 that testing would no longer be conducted at Soviet sites (Warnke 1992, 38). By taking the lead in forging a CTB treaty, the United States would be well positioned to take India up on its word and thus ensure that both India and Pakistan disavow any need for further nuclear testing.

The U.S. weapons establishment currently argues that tests are needed to ensure the reliable operation and safety of the present and future U.S. arsenal (Von Hippel 1991, 29). Recent studies, however, show that this argument is not sufficient. The have found that reliability and safety do not pose the problems that some scientists have claimed, and that there is "no technical reason why the U.S. nuclear stockpile cannot be rapidly prepared for a CTB, with little if any additional nuclear testing." (Kidder 1992, 14) The United States should therefore drop its current opposition to a CTB. By joining such an arrangement, the United States not only would be providing a valuable, perhaps crucial, boost to the international anti-nuclear norm, but would also be adding significantly to South Asian stability.

#### Disarmament

One of the most striking challenges to the anti-proliferation norm has been the nuclear arsenals of the superpowers. Their expanding stockpiles and competitive quest for strategic advantage have reinforced the fallacy that nuclear weapons can be used for political gain. The superpower stockpiles also have contributed to the feeling in the South that the nonproliferation regime is a discriminatory confidence trick—designed to ensure the dominance of the developing world by the north. With the current dramatic series of arms reductions between the United States and the former Soviet Union, Washington finally has a chance to undo some of the damage and live up to the spirit of Article VI of the NPT. After signing START II on January 3, 1993, the superpowers committed themselves to reducing their stockpiles to 3800-4250 weapons within the next seven years, and to 3000-3500 by the year 2003. They should not stop there.

The United States instead should continue to press for further reductions so as to achieve the minimum possible force consistent with stable deterrence. While estimates on the necessary size of such a force vary, a number of commentators have suggested that a force of around 1000 warheads may be sufficient (Feiveson, Dallmeyer, and Von Hippel 1992, 61). Some have even suggested that a further reduction to 100 warheads is consistent with minimum deterrence (Epstein 1992, 23). Whatever the number, there seems to be additional scope for further reductions that the United States should take advantage of. Even if the superpower arsenals cannot be dismantled any more rapidly due to technological and environmental constraints, there is no reason why the United States should not at least begin to negotiate the next round of reductions. The objective of continuing negotiations, and of such abrupt reductions, is to teach the rest of the world a dramatic lesson: the superpower arms race was a dangerous and hugely expensive waste of time and effort, and any country acting in its own self interest is clearly better off avoiding a similar situation if they possibly can.

Of all the nations in the South claiming that the NPT and the nonproliferation regime are discriminatory, India and Pakistan are perhaps the most vocal. How, they argued, could the United States criticize the nuclear programs of India and Pakistan when its own nuclear arsenal seems to be spiraling out of control? Indeed, some people have argued that a significant reason behind the Indian decision to acquire a nuclear capability in the first place was the example set by the superpowers—an example in which nuclear weapons came to be associated with international prestige and global power status (Harrison in Carnegie Task Force 1988, 123). An environment of arms reductions between the superpowers, therefore, along with a dramatic and visible lessening of their reliance on nuclear weapons, could have an especially beneficial effect in South Asia. Not only would it defuse anti-NPT criticism, but it also could improve the climate for the acceptance of regional nuclear restraint. By portraying such weapons as costly blunders, the superpowers might be able to limit the ability of Indian and Pakistani leaders to hold their nuclear programs up as symbols of national independence and sophistication. Superpower disarmament may also help to reduce popular support for the nuclear programs in each country. By promoting disarmament through its own actions, the United States may encourage disarmament movements within India and Pakistan and certainly will make it more difficult for their governments to justify an expensive qualitative or quantitative arms race.

#### CONCLUSION

Until now, U.S. proliferation policy has been concerned with trying to prevent other nations from crossing the threshold into nuclear weapons state status. The case of South Asia, however, presents the United States with a different kind of problem: how to deal with a region that already has nuclear weapons. While some academic commentators claim that such a situation is no cause for concern, this essay has argued that specific features of the South Asian Indo-Pakistani rivalry combine to make the nuclear balance between these two nations extremely volatile and unstable. Given the implications of such nuclear instability for U.S. interests, the situation in South Asia warrants significant concern.

Perhaps the most effective policy that the United States can adopt is active diplomatic engagement in the region so as to bring India and Pakistan closer together and to promote peaceful regional coexistence. While certain U.S. initiatives in this regard should be commended and continued, there are a number of problems with the overall U.S. position in the region. With the end of the Cold War, the United States has tried to engineer a radical strategic realignment away from Pakistan in favor of India. This realignment, if pressed too far, may prove to be incompatible with U.S. non-proliferation interests. It may force Pakistan to commit the very acts that the United States is trying to prevent, and it may damage the ability of the United States to bring the two rivals together in any kind of agreement.

In addition to diplomatic efforts, the United States should take full advantage of its technological resources to help stabilize the region. Through the provision of remote sensing technology and expertise, the United States may help to build any number of vital regional verification regimes and help to reduce the threat of nuclear terrorism. The transfer of other technology, however, may be a more sensitive issue, particularly those transfers that appear to legitimize the status of either India or Pakistan as a new nuclear state. While recognizing this problem, and thus urging a selective approach to technology transfer, this essay nevertheless argues that the region is sufficiently unstable that such a transfer, in this case, may be justified. Having possibly weakened the international anti-proliferation norm by dealing with India and Pakistan as nuclear states, the United States should now do what it can to bolster this norm as much as possible. To this end, this essay recommends that the United States drop its opposition to a Comprehensive Test Ban and take further steps toward a posture of minimum deterrence. These measures not only will help foster a climate of greater restraint in South Asia, but also demonstrate to the world what an expensive and dangerous white elephant the U.S. nuclear arsenal has been. Only by convincing the world that it is not in their national security interests to wind up in a nuclear rivalry can the United States hope to prevent the widespread proliferation of these weapons. Hopefully, as enough nations get the message, the world may see a day in which nuclear weapons are removed from the globe altogether.

#### Note

1 A shortened and revised version of this paper appears as "Towards Nuclear Peace", in Robert J.Art and Kenneth Waltz (Eds.) The Use of Force: Military Power and International Politics, 3rd Ed., pp.684-712.

#### **References**

- Adams, G. and P. Taibl. 1992. "Share Technology for Safer Weapons," Bulletin of the Atomic Scientists, May: 38-40.
- Albright, D. and M. Hibbs. 1992. "India's Silent Bomb," Bulletin of the Atomic Scientists, September: 27-31.
- ------. 1992. "Pakistan's Bomb: Out of the Closet," Bulletin of the Atomic Scientists, July/August: 38-43.
- Ali, Aktar. 1991. "A Framework for Nuclear Agreement and Verification." See Cohen. 1991.
- Ali, S. 1991. "U.S. Bangs Warheads Together: South Asian NFZ?" Far Eastern Economic Review, 5 December: 20-22.
- Bajpai, K.S. 1992. "India in 1991," Asian Survey, February: 217-216.
- Bidawi, Praful. 1992. "India's Passage to Washington," The Nation, Vol. 254, No.2, 20 January: 47-50.
- Blacker, C.D. and G. Duffy (Eds.). 1984. International Arms Control: Issues and Agreements. 2nd Edition. Stanford University Press.
- Brito, Dagobert and Michael Intriligator. 1983. "Proliferation and the Probability of War: Global and Regional Issues." See Brito, Intriligator, and Wick. 1983.
- Brito, D., M. D. Intriligator, and A. E. Wick, (Eds.). 1983. Strategies for Managing Nuclear Proliferation. Lexington Books.
- Burns, Susan. 1991. "Preventing Nuclear War." See Cohen. 1991.
- Carnegie Task Force on Non-Proliferation and South Asian Security. 1988. Nuclear Weapons and South Asian Security. Carnegie Endowment for International Peace.

- Chellaney, Brahma. 1991. "South Asia's Passage to Nuclear Power," International Security, Summer: 3-72.
- ———. 1991. "Regional Proliferation: Issues and Challenges." See Cohen. 1991. Chicago Tribune. 2 December 1992. 2.
- Cohen, Stephen P. 1991. Nuclear Proliferation in South Asia: The Prospects for Arms Control. Westview Press.
- Council on Foreign Relations. 1985. Blocking the Spread of Nuclear Weapons: American and European Perspectives. Council on Foreign Relations.
- Dewitt, D.B. 1987. "Confidence and Security Building Measures in the Third World: Is There a Role?" International Journal, Summer: 509-535.
  - —. 1987. Nuclear Proliferation and Global Security. Croom Helm.
- Dunn, L. 1991. "Containing Nuclear Proliferation," Adelphi Paper No.263, Winter 1991. IISS.

- Dunn, L. and J. Shear. 1991. Combating Chemical Weapons Proliferation: The Role of Sanctions and Assurances, Occasional Paper 3, Henry Stimson Center.
- Ezz, Esmat. 1989. "Preventing Proliferation of Nuclear Weapons: Hopes and Realities." See Rotblat and Goldanskii. 1989.
- Epstein, William. 1992. "And Now-The U.N. Century," Bulletin of the Atomic Scientists, May: 23.
- Feiveson, Harold, Dorina Dallmeyer and Frank Von Hippel. 1992. "Dismantling the Doomsday Machine," Technology Review, Vol.95 No.4, May: 61-78.
- Glenn, J. 1992. "At a Crossroads: An Examination of U.S. Nuclear Non-Proliferation Policy," Harvard International Review, Spring: 18-21.
- Gupta, Vipin. 1991. "Sensing the Threat: Remote Monitoring Technologies." See Cohen. 1991.
- Haass, R. N. 1988. "South Asia: Too Late to Remove the Bomb?" Orbis, Winter: 107-118.
- Harvard Nuclear Study Group. 1989. "How Might a Nuclear War Begin." See Kegley and Wittkopf. 1989.
- Ispahani, M. 1990. "Pakistan: Dimensions of Insecurity," Adelphi Paper No.246, Winter 1989/90. IISS.
- Joeck, N. (Ed.) 1986. Strategic Consequences of Nuclear Proliferation in South Asia. Frank Cass.
- Jones, Rodney. 1992. "Old Quarrels and New Realities: Security in Southern Asia After the Cold War," Washington Quarterly, Winter: 105-128.

-----. 1984. Small Nuclear Forces and U.S. Security Policy. Lexington Books.

- Kahn, R. A. 1992. "Pakistan in 1991: Light and Shadow," Asian Survey, February: 197-216.
- Kegley, C. and E. Wittkopf. 1989. The Nuclear Reader: Strategy, Weapons, War: 2nd Edition. St Martin's Press.

<sup>——. 1982.</sup> Controlling the Bomb: Nuclear Proliferation in the 1980s. Yale University Press.

- Kidder, R. 1992. "How Much More Nuclear Testing Do We Need?" Arms Control Today, September: 11-14.
- Leventhal, P. L. 1992. "Plugging the Leaks in Nuclear Export Controls: Why Bother?" Orbis, Spring: 167-180.
- MacFarquar, Emily. 1992. "Breaking a Chain Reaction", U.S. News & World Report, Vol.112 No.9, 9 March: 42.
- Mann, Jim. 4 December 1992. "China Said to Sell Pakistan Dangerous New Missiles," Los Angeles Times, 1.
- Meyer, S. 1984. The Dynamics of Nuclear Proliferation. University of Chicago Press.
- Nitze, Paul H. 1992. "Keep Nuclear Insurance," Bulletin of the Atomic Scientists, May: 34-36.
- Nye, Joseph S. 1992. "The Cause for Concern: Is Non-Proliferation Policy Mistaken?" Harvard International Review, Spring: 8-9.
- Paranjpe, S. 1987. U.S. Non-Proliferation Policy in Action: South Asia. Envoy Press.
- Pilat, J. F. (Ed.) 1985. The Non-Proliferation Predicament. Transaction Books.
- Quester, George H. 1981. Nuclear Proliferation: Breaking the Chain. University of Wisconsin Press.
- ———. 1984. "Regional and Worldwide Military Balances, Arms Control, and Crisis Management." See Jones. 1984.
- Rotblat, J. and V. I. Goldanskii. (Eds.) 1989. Global Problems and Common Security: Annals of Pugwash 1988. Springer Verlag.
- Seth, S. P. 1988. "The Indo-Pak Nuclear Duet and the United States," Asian Survey, July: 711-728.
- Simpson, J. and D. Howlett. 1991. "Nuclear Proliferation: The Way Forward," Survival, November/December: 483-499.
- Strategic Survey 1991-1992. 1992. IISS.
- Squassoni, S. A. 1991. "Confidence and Security Building Measures: An Inventory of Approaches," prepared for the Los Alamos National Laboratory, Contract 9-XF-7341W-1, (SAIC Inc., 11 March).
- Subrahmanyam, K. (Ed.) 1985. Nuclear Proliferation and International Security. New Delhi: Institute for Defense Studies and Analysis.
- Tanham, G. 1992. "Indian Strategic Culture," Washington Quarterly, Winter: 129-142.
- Ullman, Richard. 1989. "The Covert French Connection," Foreign Policy, Spring: 3-33.
- United States Senate. 1991. Hearing Before the Committee on Governmental Affairs, 101st Congress, October 9, 1990, Questions and Statements of Senator John Glenn, Proliferation and Regional Security in the 1990s, S.Hrg. 101-1208. U.S. Govt Printing Office.
- UPI Newswire. 15 August 1992. "India, Pakistan to Talk Peace." ———. 3 September 1992. "India Threatens to Teach Pakistan a Lesson."

4 November 1992.	"India,	Pakistan	Report	Progress	in	Talks	to	End
Glacier War."			-	U				

----. 18 November 1992. "U.S. to Sell Spy Satellite."

-----. 15 December 1992. "India Sacks State Goverments, Imposes Direct Rule."

-----. 29 December 1992. "Pakistan Orders Two-thirds of Indian Consulate Staff to Return Home."

------. 30 December 1992. "Indian General Reports Fresh Fighting on Disputed Himalayan Glacier."

------. 3 January 1993. "Indian Scientists Will Carry Out Another Test."

------. 11 January 1993. "India Calls for Disarmament Following START."

- Vanaik, Achin. 1987. "Nuclear Fallacies in India and Pakistan." See Worsley and Hadjor. 1987.
- Varshney, A. 1991. "India, Pakistan, and Kashmir: Antinomies of Nationalism," Asian Survey, November: 997-1019.

Von Hippel, Frank. 1991. "Test Ban Debate, Round Three: Warhead Safety," Bulletin of the Atomic Scientists, April: 29-40.

Warnke, P. C. 1992. "Missionless Missiles," Bulletin of the Atomic Scientists, May: 36-38.

Worsley, P. and K. B. Hadjor. 1987. On the Brink: Nuclear Proliferation and the Third World. Third World Communications.