

There have been many recent cases of states reversing course. Russia has embraced capitalism and democracy, China has thrown open its doors to foreign investors, and previously white-ruled South Africa has abandoned apartheid. While such events are always unexpected, after historians have done their work, it becomes clear that each was the result of a gradual destabilization of the prevailing orthodoxy. Their timing was usually determined by contextual changes and contingent events that forced leaders to conclude that “the situation is no longer tolerable.”

Equally, there are circumstances in which policies remain frozen (such as in contemporary Iraq) or when change occurs only after long delay (the Soviet Union under Brezhnev). Policies may be dysfunctional from most vantage points, but ruling elites cannot or will not embark on radical change. The nation state then becomes trapped for reasons having to do with a complex interplay of domestic and external factors. In some cases, broad political support for the *status quo* may become more rather than less entrenched, especially if there is heavy foreign pressure to abandon it.

This perspective is helpful in analyzing India’s current policy on nuclear weapons. For 30 years, its policy has been remarkably consistent. But over the past decade India’s stance in this area has become increasingly dysfunctional. Post-Cold War arms reductions, more vigorous nonproliferation policies, and negotiations towards a Comprehensive Test Ban Treaty (CTBT) are causing India to suffer a serious loss of positional advantage in the international nuclear arena. Furthermore, its “latent power” is under siege as the CTBT threatens to limit its freedom to develop and exploit its nuclear capabilities. At the same time, geopolitical changes and developments in relations with and the capabilities of neighboring states are raising awkward questions about the relevance of nuclear weapons to India’s security and status.

Current conditions, therefore, favor radical change. But India seems trapped. For reasons internal and external to the country, India is experiencing extreme difficulty in finding a pathway out of the labyrinth that it has ventured into. It seems unable to advance or retreat. And because India is trapped, the international community is also trapped. The scope for universalizing the

nonproliferation regime, and for making progress on arms control and disarmament, is substantially reduced by India’s immobility. In particular, India has attained—by being identified in the text of the CTBT approved by the United Nations as one of the countries that must join—an effective veto over the treaty’s entry into force.

Finding the pathway out of the labyrinth is therefore one of the most important tasks that India and the international community faces today. But the labyrinth is not just of India’s making: it also connects, especially through China, into a much larger labyrinth, comprising the policies of

the nuclear weapon states (NWS) and their approaches to nonproliferation and disarmament, and indeed the whole edifice of the nonproliferation regime. There is preference for treating the “Indian problem” as a local issue. It is more than that: it is a systemic issue and may be incapable of resolution without systemic movement.

**VIEWPOINT:  
INDIA’S NUCLEAR  
LABYRINTH**

by William Walker<sup>1</sup>

**THE INDIAN NUCLEAR PARADIGM<sup>2</sup>**

India’s nuclear weapon policies took shape between the late 1950s and early 1970s, partly in response to a series of shocks—the 1962 border war with China, the 1964 Chinese nuclear explosion, and the 1965 and 1971 wars with Pakistan.<sup>3</sup> The Gandhian conception of international society, and of India’s role within it, gave way to a harder approach based upon realpolitik. Security had to rest on power, and power on capabilities. A distinctive nuclear paradigm evolved in these and subsequent years, entailing a set of attitudes and judgments and a set of prescriptions.

The attitudes and judgments can be summarized as follows:

- *India is on its own.* India had to be able to look after itself as alliances with foreign powers were either unattainable or untrustworthy. This was expressed as non-alignment during the Cold War, but it went deeper.

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India's history suggested that foreign powers were only interested in subjugation, were little prepared to grant India its rightful place in the international order, and would only come to India's assistance out of narrow self-interest. One early conclusion was that other powers' nuclear umbrellas could not be trusted.

• *Nuclear weapons confer status, security, and leverage.* This was evident from the prominent positions attained by the five NWS since 1945, reinforced by their permanent membership in the U.N. Security Council. India's association of nuclear weapons with *status* was heightened by China's increased recognition as a great power after 1964, with *security* by Pakistan's quest for nuclear weapons after 1971, and with *leverage* by the perception that a non-nuclear India would remain prone to being pushed around by the United States and other nuclear powers (the deployment of the *USS Enterprise* in the Bay of Bengal in 1971 being the totemic event).

• *The NPT is primarily an instrument of great power politics, and only secondarily an instrument of collective security.* According to this view, the NPT and associated trade controls have been developed *against* the developing world and against India in particular. The NPT confers power on a small minority of states while denying it to the large majority. There should be no compromise with this legalized discrimination.

• *Nuclear weapons are immoral.* In the last two years of his life, Mahatma Gandhi spoke frequently of the immorality of nuclear weapons. Their development was "deadening the finest feeling that has sustained mankind for ages."<sup>4</sup> This strain of thinking survived in India's persistent calls for complete nuclear disarmament. Even after the events of the 1960s, Indian attitudes towards nuclear weapons were deeply ambivalent: they were admired and abhorred in equal measure.

India's nuclear paradigm became associated with three prescriptions. Firstly, that India should develop the option to deploy nuclear weapons. Unless and until its security was gravely threatened, India's nuclear weapon policy should remain open-ended and ambiguous, offering both the lure of disarmament and the threat of armament. This position satisfied the popular desire that India would one day become a great power *primus inter pares*, while allowing it to limit costs to the domestic economy and to its foreign relations. It also gave India latent military power without committing the Armed Forces to ac-

tivate it, thereby protecting their budgets and avoiding difficult and unnecessary responsibilities. Furthermore, it allowed India to pursue nuclear weapons while still claiming the moral high ground.

The second prescription was that India should become self-reliant in the technologies pertaining to nuclear weapons. India should gradually accumulate, mainly through indigenous effort, the range of capabilities that would allow it to assemble an effective nuclear deterrent against potential enemies and that would render it immune to foreign controls on technology transfer. It should concentrate mainly on research, development, and demonstration, avoiding until absolutely necessary the high cost of production runs. This technology strategy would be inherently dual-use, serving India's desire to gain both economic and military advantage.

The third prescription was that capacities to produce weapon-grade material should be established outside international safeguards. Those capacities would allow India to supply its weapon program without scrutiny and without breaching international undertakings.

Over the years, this set of beliefs attained considerable intellectual and operational coherence. It gained solidity from the nascent Pakistani nuclear weapon program, from shared interests with other countries in the non-aligned movement (such as Argentina, Brazil, Mexico, and Yugoslavia), and from the punishment that was meted out to India, particularly in the form of technology denials. This punishment and the perceived discrimination against India by states parties to the NPT, ensured broad political support for the nuclear weapon program, despite the disinterest, skepticism, or hostility with which many Indians regarded nuclear weapons themselves.

## THE CHANGING ENVIRONMENT: FROM COMFORT TO DISCOMFORT

By the 1990s, India found itself having to respond to major changes in the international environment which, if not completely destabilizing its nuclear policies, certainly unsettled them. They included: the geopolitical changes ensuing from the end of the Cold War and from shifts in the locations of economic dynamism; the maturation of Pakistan's nuclear weapon program and deepening of the conflict over Kashmir; international developments in arms reduction and nonproliferation policies; and the negotiation and conclusion of the CTBT.

### Political-Military Relations with China and Pakistan

Since Pakistan launched its nuclear weapon program, India has been engaged in a pair of asymmetrical strategic relationships, entailing inferiority versus China and superiority versus Pakistan. Negating the inferiority and maintaining the superiority have motivated its nuclear and missile development policies.

China's superiority stems partly from geographical advantage, and partly from technological leadership. New Delhi and the main population centers in northern India lie within 300 miles of the Chinese border in Tibet, whereas Beijing and Shanghai are 2,000 miles from India's border with China. If it chose, China could always threaten India with nuclear weapons (or advanced conventional weapons) more cheaply and to greater effect than India could threaten China. After 30 years' experience as a nuclear power, China's technological and operational advantages over India are extensive and will become still more extensive as its nuclear modernization programs are completed. India now possesses the capability to deliver payloads well into Chinese territory, as demonstrated by the successful testing of the Agni rocket. But it is still a considerable way from having the ability to deliver nuclear payloads, let alone mount a credible minimum deterrent against China, with the requisite second-strike capability.

Since India's military conflict with China in the early 1960s, the rationale for *deploying* nuclear weapons against China has steadily weakened. Soon after its nuclear test, China adopted a policy that limited its capability to that of a minimum deterrent against Soviet and U.S. deployments in eastern and northern Asia. And China did its best, by committing itself to a "no-first-use" strategy and by keeping nuclear weapons away from frontiers with Asian neighbors, so as not to provoke retaliatory nuclear weapon programs. In subsequent years, and especially since Rajiv Gandhi's visit to Beijing in 1988, India's relations with China have steadily improved.<sup>5</sup> There has been progress towards settling border disputes and commercial relations are developing rapidly, including the first tentative steps towards engaging in civil nuclear trade.<sup>6</sup>

These developments stem from mutual interests in cooperation and in discouraging either side's deeper involvement in the other's sphere of influence. Thus, China's interest has lain in keeping India docile on Tibet, in discouraging Indian political intervention in East

and Southeast Asia, and in giving India as little cause as possible for developing a closer relationship with the United States. India's interest has lain in limiting Chinese interference in the politics of the sub-continent's northern regions (including Kashmir), and in trying to weaken the Chinese link to Pakistan. Both have wished to reduce the costs of policing long mountainous borders. Both have wished to benefit from the other's economic development.

This said, India remains wary of China's long-term intentions. It has not come to terms with China's occupation of Tibet, even if it has learned to keep quiet over it. It does not accept that China has a higher claim than itself to be called a great power, and resents the haughty disregard with which China often treats India. It abhors the role that China has played in helping Pakistan to acquire nuclear weapon technologies, and the freedom granted to China to develop and deploy its own nuclear weaponry in contrast to the persistent foreign intervention in India's own programs. In the mid-1990s, India has watched with trepidation the reform and re-equipment of China's armed forces, its precipitous economic expansion, its aggressive behavior towards Taiwan, Hong Kong, and territories in the South China Sea, its development of port facilities in Myanmar, and its continuing political repression in Tibet and Xinjiang. India's desire to provide itself with a long-term nuclear option has not diminished as a result.

It is worth noting that there is no evidence that China has at any time expressed concern about the Indian nuclear weapon program.<sup>7</sup> Nor has the Chinese government tried to exert pressure on India to desist.<sup>8</sup> In addition, China has appeared unconcerned that its assistance to Pakistan in the 1980s and 1990s might, by provoking India to double its efforts, weaken its own strategic position. One can only conclude that China has not felt much threatened by India's nuclear weapon program, despite India's repeated identification of China as one of the program's main objects. On the contrary, China may have found the program helpful to its interests (although this attitude may now be changing): it has caused division between the Indian and U.S. governments; it has provided a nuclear-armed China with shelter within the non-aligned movement; and the nuclear rivalry between India and Pakistan has turned Pakistan into a client state of China while absorbing India's scarce resources. From a Chinese vantage point, India has probably been weakened more than strengthened by its

nuclear activities.

Whereas China has maintained its nuclear superiority over India, India has been less successful in regard to Pakistan, which has established an impressive nuclear capability over the past two decades. Pakistan is now believed to have the ability to assemble and test nuclear warheads and to deliver them over the comparatively short distances to New Delhi. Pakistan lacks the resources to win an arms race with India, but it has been rather successful in the "capability race" that it has waged instead. Indeed, by acting like the proverbial thieving magpie, it may have achieved superiority in some areas of technology. Where warheads are concerned, its disadvantage now appears to stem more from its comparative shortage of fissile materials, although its supply problems may diminish when the unsafeguarded reactor at Khushab begins to operate.

As a consequence, a rough equivalence in capabilities, and thus a state of mutual deterrence, appears to have been established between India and Pakistan. Pakistan may already have used the threat of nuclear retaliation to discourage an Indian conventional attack in 1990. Its threats in the mid-1990s to match India's deployment of Prithvi, or any explosion of nuclear devices, may have been similarly effective especially since they invited a strong U.S. response to any Indian action.

In truth, full deployment is probably the only means by which India could re-establish its nuclear superiority. Pakistan might still have the capabilities to assemble a minimum deterrent, but its resources would hardly be sufficient to mount an effective second-strike capability. Deployment might therefore restore lost strategic advantage and stretch the Pakistani economy to its limit. This is reminiscent of the Reagan administration's policies towards the Soviet Union in the early 1980s. Tempted though India may be to pursue such a course, there are powerful disincentives. Deployment would jeopardize its foreign relations, risk increasing Chinese and U.S. political and military support for Pakistan, and place new burdens on its own economy when public resources are scarce. Furthermore, is it in India's interest to put an increasingly fragile and volatile Pakistan under such pressure? The consequences would be highly unpredictable.

It therefore seems unlikely that India can escape from a rough strategic parity with Pakistan, in the form of the "recessed" or "non-weaponized" deterrents that both ap-

parently possess.<sup>9</sup> Some Indian analysts argue that a *de facto* arms control process is in place, with the Indian and Pakistani governments moderating their actions to avoid confrontation.<sup>10</sup> This claim deserves some respect, but parity does not ensure stability, and recessed deterrence is not, especially in military minds, the same as deterrence. With little transparency or trust on either side, there is plenty of scope for misinterpretation, and for the political and institutional exploitation of worst-case analyses.

Unfortunately, the Indian and Pakistani governments have so far failed to build stability into the situation through arms control agreements, partly because Kashmir has so upset their relations. In 1990-91, a few confidence-building measures were negotiated, including an important agreement not to attack one another's nuclear installations, but that has been all. Instead, an attempt has been made by other powers to exercise arms control from the outside, through bilateral and multilateral measures (e.g., denial of access to technology, safeguards on nuclear materials) and especially through U.S. diplomatic leverage and legal constraint. By a mixture of entreaty, inducement, and intimidation, successive U.S. governments have tried to quench the fires. But this has been a poor substitute for restraint achieved through dialogue.<sup>11</sup>

In regard to both China and Pakistan, India's attachment to nuclear weapons therefore remains strong in the new political environment. Nevertheless, the security benefits that India gains from them seem increasingly open to question. Nuclear weapons may have psychological value for India as it contemplates China's development in years ahead, but it is becoming harder to see how India could use them to influence Chinese behavior in any substantial way. And in the context of relations with Pakistan, nuclear weapons have, if anything, blunted the advantage that India undoubtedly possesses in the field of conventional warfare. As such, it would be surprising if hard-nosed military strategists were not asking searching questions about their present and future utility.<sup>12</sup>

### The Nuclear Test Ban

A threshold country acquires "latent power" by assembling nuclear weapon capabilities outside international safeguards. This power only has value to its holder if there is a real prospect that the capabilities might eventu-

ally be used to deploy an effective nuclear force. The possibility of translating latency into actuality therefore has to exist, and to be recognized as existing both by a state's armed forces and by its potential adversaries, if the capability is to be taken seriously at home and abroad.

Moving from latency to actuality does not only, or necessarily, involve the explosion of nuclear devices. The recent debates around the CTBT have revealed the variety and complexity of processes by which the effectiveness of nuclear weapon designs may be assured. For a threshold state, as for a NWS, there are three principal ways of gaining confidence: 1) through external assistance, including access to test data, or best of all to the blueprints of tested warheads; 2) by exploding complete nuclear devices and monitoring the consequences; or 3) by testing warhead components and assemblies using non-fissile materials, by hydronuclear and hydrodynamic testing, and by using dynamic modelling techniques to simulate the assembly and disassembly phases in nuclear explosions (these last techniques are rendered less effective if they cannot be calibrated by explosive testing).

Outside the inner walls of India's government and nuclear institutions, it is not known how far India has gone towards verifying the effectiveness of its nuclear weapon designs since the single nuclear explosion in 1974. Nor is there reliable evidence of the types of warhead that it has tried to develop. Unlike Israel and Pakistan (allegedly), India has not gained or sought external assistance.<sup>13</sup> It undoubtedly has the expertise to manufacture a moderately sophisticated fission weapon, using plutonium as the fissile material, and could deploy such a device without needing to test.<sup>14</sup> A test ban's main effect on India would be to impede a program of miniaturization and to obstruct India's development of thermonuclear weapons. Given the analytical tools available to Indian laboratories, and the extensive information in open literature, only a relatively primitive thermonuclear design might be assembled.<sup>15</sup>

A ban on nuclear testing would thus greatly complicate, and probably rule out, certain kinds of nuclear missile deployment (notably cruise missiles, multiple warheads, and even submarine-launched ballistic missiles). It would require India to deploy larger rockets, and to use larger and less efficient warheads. Mounting an effective nuclear deterrent that entailed delivering nuclear warheads over long distances would become especially problematic. The conclusion is inescapable: a

test ban would inflict a substantial loss of latent power on India, not least because it would be barred from the trade in simulation and other technologies that the NWS have been indulging in during the CTBT's negotiations. (Article I of the NPT forbids such transfers to all countries apart from the NWS.)

A test ban would probably have little effect on India's ability to deploy a credible nuclear deterrent against Pakistan, in which context sophistication and miniaturization are not at a premium. Its true significance lies elsewhere. The ability to develop an effective nuclear force that might one day be deployed against China would be substantially impaired.<sup>16</sup> A test ban would underline the permanence of India's secondary or even tertiary status as a nuclear power by limiting the capabilities that it could credibly deploy.

India's *de jure* or *de facto* compliance with a test ban would have another effect. It can plausibly be argued that India has never known where it has been going with its nuclear weapon program.<sup>17</sup> The program has been loosely directed towards various "fuzzy futures," involving images and fantasies of both external threats and national aggrandizement. Put bluntly, an effective test ban would explode those fantasies. Those funding India's nuclear weapon programs would probably demand a harder definition of costs and benefits than has so far been provided.

### The NPT and India's Status

There is widespread Indian perception that the NPT enshrines the denial of great power status to India and its conferral on a small group of nations, including China, that has no greater right to possess it. Antagonism toward the treaty, and towards its associated instruments of nonproliferation policy, has long provided the "binding energy" that unites the body politic behind India's own attainment of nuclear weapon capabilities. In periods when the regime has been undergoing strong development, India's attachment to nuclear weapons has tended to increase rather than decrease, irrespective of their contemporary relevance to India's security. Especially in the 1990s, the intensification of international measures *against* nuclear weapons has paradoxically led to the intensification of political support *for* nuclear weapons within India.

In the years just before and after India achieved its independence, Jawaharlal Nehru and other political lead-

ers enunciated a vision of an international society that would be just and egalitarian, and in which social progress and international harmony would be achieved through non-violent and democratic means. This vision grew out of India's particular historical experience of foreign domination and colonialism, the success of Mahatma Gandhi's non-violent rebellion against the British Raj, and the blending of Indian and European idealist traditions (many of the early leaders received European educations). It was also consonant with the Congress Party's advocacy of socialism and secularism as the best foundations for a stable and prosperous Indian state, faced with the hierarchical and multicultural nature of Indian society.

As many observers of India have noted, this political philosophy coexisted with an opposite trait.<sup>18</sup> Wherever India's own status was in question, it refused to be content with equality and was keen to assert its superiority. This was evident from the outset in the Indian government's handling of relations with Pakistan and in its quest for leadership of the non-aligned movement.<sup>19</sup>

In India's longstanding advocacy of nuclear disarmament, and in its critique of the NPT, one finds traces of India's early vision of a world free of injustice, hierarchy, and violence. But there is also an acute, and many would say anachronistic, awareness of the political advantage that comes with the possession of nuclear weapons, and the disadvantage that accompanies their denial.

India's grievances have been deepened by a popular perception that it is, and always has been, the regime's (and the United States') main target. The evidence is compelling in Indian eyes. Unlike Britain, France, and China, India was punished for carrying out a nuclear test. Whereas every opportunity has been seized upon to obstruct India's missile program, China's much more extensive program has been unencumbered. The first steps to establish multilateral technology controls, in the shape of the Nuclear Suppliers Group guidelines and the Missile Technology Control Regime, were partly taken in response to Indian actions (the 1974 explosion, the launch of the SLV-3 rocket in 1979 and of the Indian Guided Missile Development Program in 1983), and the controls have been used ever since to constrain India's nuclear and space programs. There are further complaints that India has been demonized in the U.S. press and by U.S. non-governmental organizations, whereas Israel's nuclear activities are seldom mentioned by them, let alone criticized.

Hence there is a real sense in which the NPT, as much as India's regional adversaries, has become the energizer, target, and justifier of India's nuclear weapon program. In the Indian case, the NPT has ironically become an *incitement* to proliferate. This is manifested in the common but paradoxical attitude found among Indians who are against nuclear weapons, but even more strongly against the NPT. Thus, they favor actions that defy the NPT and, hence, support the Indian nuclear weapon program. Fury at the NPT has therefore widened the constituency in favor of a nuclear India and created a consensus where no consensus might otherwise exist.

The CTBT has added insult to injury. A common Indian viewpoint is that the CTBT is being used to enforce "nuclear apartheid," and to complete the NWS' project to achieve a perpetual and exclusive monopoly sanctioned by the NPT.<sup>20</sup> Indian critics of the CTBT point out, accurately, that the NWS' ability to deploy warheads to existing designs will not be affected by the treaty, and that they will be able to continue developing some aspects of warhead technology.<sup>21</sup> They also note that the NWS have been sharing simulation technology and building new diagnostic facilities in order to sustain their arsenals (witness the new agreement between France and the United States to share information). Critics point as well to the fact that government officials in the United States, France, and the United Kingdom have been openly courting domestic and ministerial support for the CTBT by portraying it as serving nonproliferation purposes above all others. Again, the view from New Delhi is that India is being singled out for persecution.

India's anguish has been heightened by its longstanding advocacy of the CTBT. Prime Minister Nehru was the first to propose a test ban in 1954, and an end to testing has been a constant theme in India's nuclear diplomacy ever since. In 1994, it even co-sponsored the U.N. resolution calling for the treaty's negotiation. Rejection of the CTBT places India's credibility on the international stage at serious risk, and encourages the view that India's position on nuclear disarmament is disingenuous.

### **India's Isolation**

While India's antagonism towards the NPT has been unceasing, many other countries have made their peace with the treaty and now share its ambitions. Criticisms of the NWS for their failure to honor disarmament

pledges have not abated, but the NPT has increasingly come to be regarded as the common property of nations, and a truly collective instrument of international security. Beyond the expansion in NPT membership, the common purpose of preventing nuclear proliferation has been reflected in the roles played by the U.N. Security Council in the attempted disarmament of Iraq and North Korea. It has also been evident in the growing proportion of the globe that is being covered, at the instigation of the non-nuclear weapon states (NNWS), by nuclear-weapon-free zones.

Over the past 15 years, India has therefore become increasingly isolated in its antagonism to the NPT and associated instruments of nonproliferation policy. The changing structure of the international nuclear "order" is evident in the NPT's membership. Whereas India was one of 48 non-NPT states in 1981, in September 1996 it was one of only eight.<sup>22</sup> And whereas there were six non-NPT threshold states with nuclear weapon programs in 1981 (Argentina, Brazil, India, Israel, Pakistan, and South Africa), today there are only three. Apart from this "hard core" and Brazil (which is, however, bound by its commitments under the Treaty of Tlatelolco), there are no geopolitically significant countries left outside the NPT.

The agreements reached in May 1995 by NPT parties to extend the treaty indefinitely and to enhance the process whereby the treaty is reviewed, were setbacks for India. They confirmed its isolation, lack of influence, and failure to grasp the mood of the international community. The Indian caricature of the NPT as a tool of the NWS—the means by which they safeguard their nuclear monopoly—still has a powerful grip. But the Indian political elite has seemed unwilling to acknowledge that the regime has gained authority from other sources: the widespread antipathy towards nuclear weapons within contemporary international society (demonstrated clearly by reactions to France's nuclear testing at Mururoa); an alliance of interests between NWS and NNWS parties to the treaty in preventing the spread of nuclear weapons; and the desire of leading NNWS to use the NPT and its procedures to push the NWS down the path towards further arms control and reduction measures (and towards eventual nuclear disarmament). In essence, the NNWS parties wish to transform the NPT into an instrument of nonproliferation *and* disarmament, implying the restraint of India on both counts.

India therefore finds itself pitched against a formidable array of nations. Furthermore, they have now enunciated in the "Principles and Objectives for Nuclear Non-Proliferation and Disarmament" a set of ambitions that run directly counter to India's perceived interests.<sup>23</sup> Those ambitions include the attainment of universal adherence to the NPT as an urgent objective which is to be pursued by *all* states parties to the treaty; the negotiation and implementation of a CTBT and fissile material cut-off treaty (FMCT); the achievement of further nuclear-weapon-free zones, especially in "regions of tension"; and the linkage of nuclear trade to acceptance of full-scope safeguards and legally binding commitments not to acquire nuclear weapons. India is faced with the uncomfortable reality that the "Principles and Objectives" commit the great majority of nation states to achieving the nuclear disarmament of the remaining non-NPT threshold states. Whether it likes it or not, the clauses which embody this commitment are more precise and emphatic than those addressing the behavior of the NWS and the achievement of complete nuclear disarmament.

By excluding itself from the CTBT, and by unsuccessfully trying to thwart the treaty's opening for signature in the United Nations, India has confirmed both its isolation and the weakness of its position. Although indeterminate, the costs to India could be considerable, and might not be confined to the nuclear and security domain. It risks denial of economic and other forms of cooperation, a loss of international respect, and a loss of leverage on the international stage except of a negative kind (we shall inflict harms A and B unless the rest of you do X and Y). If India sticks to its policy of preventing the CTBT's entry into force, it will invite opprobrium as well as isolation. In its current mood, it does not seem to care.

### **Economic and Political Change**

Attention should also be drawn briefly to two contextual changes—in economic policy and in the complexion of the Indian government—that have significant implications for nuclear decisions. Their consequences for the nuclear weapon program are both unpredictable and ambiguous.<sup>24</sup> How the economy performs and is managed (and to whose advantage) are *the* issues in Indian politics, as was evident in the recent general election.<sup>25</sup> The future of the liberalization program may still hang in the balance, but a new economic elite is emerging that is outward-looking and more concerned with profit and competitiveness than with India's abilities to wield

political and military influence. Furthermore, the Indian economy is increasingly liable to being hurt by the judgments of foreign investors and capital markets, and is passing through a period of vulnerability to international financial sanctions. All of this tends to “demote” nuclear weapons and invite restraint.

Set against this, India’s economic transformation is being accompanied, as so often happens, by the rise of nationalism and introspection. As was recently evident in the manifesto of the Bharatiya Janata Party (BJP), the possession of nuclear weaponry has been invested with symbolic importance by the advocates of a proud, assertive, and self-reliant India. The Indian government’s defiance of external pressure to join the NPT and CTBT also helps counter charges that it has, through the liberalization program, consented to the extension of U.S. economic “hegemony” over India. As defiance of economic forces has become more difficult, so nuclear weapons have acquired an aura of the final guarantors of India’s independence.

After the general election in May 1996, the BJP gained the largest share of the votes but failed to form a viable government. The presumption is that the coalition which subsequently formed the government will be unable to act decisively to change India’s stance on nuclear weapons, in whichever direction: it will seek to preserve the *status quo*. When the new government announced in mid-June that India would not join the CTBT in its then current form, it emerged that there was unanimity across the political parties—a rare occurrence in Indian politics.

### **Strengthening and Weakening of India’s Nuclear Paradigm**

In summary, recent developments have tended to reinforce, if modify, the attitudes and judgments underpinning India’s nuclear paradigm. There is a belief that the international community is not sensitive to India’s security concerns, and is trying to deny India its sovereign right to defend itself, while the NWS continue to expound—to domestic audiences and recently before the International Court of Justice—the value of nuclear weapons to their national security. There is also a belief that the efforts to secure the NPT’s indefinite extension and to conclude a CTBT have been cynical exercises aimed at achieving eternal “nuclear apartheid.” As instruments of mass destruction, however, nuclear weapons are still seen as immoral, and complete nuclear

disarmament remains the primary international objective. However, India’s renunciation of nuclear weapons—while others possess—they is also portrayed as being morally reprehensible.

These are the views that one sees expressed in the Indian press and in public statements.<sup>26</sup> The private assessments, especially in military and foreign policy circles, may be less flattering to nuclear weapons or to India’s nuclear weapon policies. In those circles, there *may be* awareness of the limited utility of nuclear weapons in the context of relations with both China and Pakistan and of the costs that India is incurring through its isolation (but secrecy makes it difficult to tell). Despite these doubts, the Indian body politic remains deeply attached to the paradigm described above.

Nevertheless, the set of *prescriptions* for giving reality to India’s prowess in nuclear weapons looks increasingly threadbare as the grip of post-Cold War arms reduction and nonproliferation measures is tightened. What is the meaning of an “option to go nuclear,” especially in regard to deterrence of China, if confidence in the option cannot be demonstrated through testing? Even if India stayed outside the CTBT, would it ever have the stomach to test nuclear weapons in defiance of world opinion? Hence the paradox that is central to the “Indian dilemma”: while India’s domestic political and psychological dependence on nuclear weapons has tended to increase, its ability to exercise power to its advantage through the threatened deployment and use of nuclear weapons is diminishing, as is its ability to gain a higher international standing through their possession.

### **THE FOUR CENTRAL QUESTIONS**

In trying to find a policy approach that will release India (and the international community) from its trap, the Indian government and by extension foreign governments therefore find themselves having to address four central questions:

1. Can India solve its problems by changing the rest of the world, and especially the policies of the main holders of power, either by persuading them that India’s stance on nuclear weapons is justified and in their mutual interest after all, or that the world should take decisive steps towards complete nuclear disarmament?

2. If (1) is infeasible, can India profit by conducting a series of nuclear tests to establish confidence in its nuclear weapon designs, possibly prior to acceding to the CTBT?

3. If (1) is infeasible, and (2) is injudicious, can India adjust its nuclear weapon program, in the face of test bans and other multilateral initiatives, so that its basic goals, and the paradigm that underpins them, can survive unchanged without jeopardizing its international standing?

4. If (1) is infeasible, (2) is injudicious, and (3) is unlikely, can India's longstanding nuclear paradigm be abandoned, in whole or part, and replaced with something else? What changes in approach by foreign powers, and by the wider international community, are required to allow that to happen?

Let us consider each question in turn.

### **Changing the Rest of the World's Attitudes and Policies**

Partly because foreign governments have been so unsuccessful in influencing Indian behavior, and partly because the stakes have risen, there has been substantial investment in recent years in gaining a better understanding of what drives the Indian program.<sup>27</sup> The result has been an increase in empathy but not in sympathy or acceptance. The principal reason for this dichotomy is that few if any foreign actors find that India's nuclear program serves their interests. In foreign ministries, it offends against the widespread desire to achieve universal adherence to the nonproliferation regime, and brings many complications to relations with India and Pakistan and to relations between those that have chosen to intervene in the sub-continent (notably China and the United States). In defense ministries outside South Asia, India's nuclear capabilities are viewed as neither sufficient nor sufficiently helpful for there to be common cause.

There is a paradox here. If India had already successfully established a nuclear deterrent against China, in particular, strategic analysts in Washington, Moscow, and other capitals might have regarded it as another useful part of the strategic balance.<sup>28</sup> Precisely because the Indian nuclear capability has so far achieved little deterrent value against China, it is discounted and there is no possible community of interests. On the other hand, where deterrence of sorts has been established—against Pakistan—it is regarded by foreign powers as a liability

rather than an asset. The reason is, of course, that the containment of China is a geopolitical issue, whereas India's containment of Pakistan (or Pakistan's containment of India) is regarded as a local and "bounded" issue, albeit with the capacity to irritate foreign powers.<sup>29</sup>

So efforts by New Delhi to change foreign attitudes towards India's nuclear weapon policies are unlikely to be persuasive. Nor is India's own initiative on nuclear disarmament likely to fare much better. Establishing a "time-bound framework" for nuclear disarmament has become the centerpiece of India's nuclear diplomacy.<sup>30</sup> It was deployed in the margins of the NPT Extension Conference in 1995 and was the main condition attached by the Indian government to its accession to the CTBT. The proposal, which builds on ideas contained in Rajiv Gandhi's address to the United Nations in 1988, is that all countries should commit themselves to nuclear disarmament and should set a timetable for achieving it. The proposal has clear attractions for India: it would bring the NWS down to its level, disarm China, and realize a genuine and long-held Indian ambition. If rejected, India might still, it was hoped, stand to gain politically. Its rejection would help sow dissension between NWS and NNWS and generate sympathy for India's position, not least because time-limited disarmament has been espoused by some other countries, especially in the non-aligned movement.

Unfortunately for India, this has not been the outcome. Instead, India's disarmament proposal has tended to increase perceptions, among NWS and NNWS alike, that India's stance is disingenuous. What this rejection reveals above all is India's lack of influence and leverage on the international stage. Its "structural power" is still very limited, causing it to have little ability to shape the international agenda or influence responses to it. There are many reasons. India's capabilities, of whichever kind, are not extensive; its economy, while increasing in importance, has insufficient weight to affect global financial trends; it is not a member of a close community or alliance of states (one of the costs of non-alignment); and it is not a permanent member of the U.N. Security Council with veto rights. Where international nuclear relations are concerned, India is no match for the United States, let alone for the United States acting in concert with its allies and with other states, such as China and Russia.

India lacks structural influence in another, more di-

rectly relevant, respect. Despite its nuclear weapon program, it is still largely peripheral to the game-play that defines the form of and movement in global power relations in the late 20th century. This arena mainly involves political, economic, and military relations among the United States, Russia, China, and the other states that are enmeshed with this triangle (such as Japan and the European countries). The future course of nuclear arms control and disarmament policy will be determined firstly by developments in these relations, secondly by bargaining within the NPT review process, and only a distant thirdly by Indian protestations. One could add that the Indian sub-continent is not even, when the chips are down, the most vital area of concern in regard to nuclear proliferation. It is surpassed by the Middle East and East Asia, where the barring of further access to nuclear weapons has become an absolute requirement. One is forced to the conclusion that, in terms of *realpolitik*, India does not matter enough to be able to bend the international community to its will.

There is an important caveat to all this, as everyone is now only too aware. The CTBT's final text requires India's, and 43 other named countries', ratification before it can enter into force. The dubious insistence by the Chinese, Russian, and British governments (the last in particular) on inserting an entry-into-force clause that would tie India's hands has given it the ultimate power to obstruct the treaty's implementation, a power that it presently seems determined to exercise.<sup>31</sup> In so doing, India has put itself in the extraordinary position of exercising a unilateral veto over the arms control measure that it has historically cherished above all others.

The option has been created to convene a conference three years after the anniversary of the CTBT's opening for signature which will "consider and decide by consensus what measures consistent with international law may be undertaken to accelerate the ratification process in order to facilitate the early entry into force of this Treaty."<sup>32</sup> Presumably this conference would be called, if necessary, in the latter part of the year 2000, given that the CTBT was opened for signature in September 1996. As such, its timing would nearly coincide with the next NPT review conference and the conclusion of the NPT review process that will precede it. In consequence, India will also gain indirect influence over the review process and may gain fresh opportunities for re-establishing the prestige of its disarmament proposals and forging new alliances with countries in the non-aligned

movement. In these respects, India may after all have been granted some leverage over the NWS, by the NWS, as they prepare to defend their corners in the coming debates.

Furthermore, India has gained substantial influence over the decision whether and when to open negotiations on the FMCT. The formation of a Conference on Disarmament (CD) subcommittee on nuclear disarmament is the condition being attached by India to the formation of a subcommittee that would empower the CD to take the FMCT forwards. Whether or not this is a device to obstruct another measure that would impede India's nuclear weapon program, the NWS have refused to give in and there is a risk of stalemate.

### Conducting Nuclear Test Explosions

One can safely assume that the Indian government, along with R&D laboratories and other pertinent actors, has examined closely in recent months the costs and benefits of conducting nuclear test explosions. Here are four of the conclusions that they might have reached.

Firstly, India would gain useful knowledge from such nuclear tests. But whether it would gain *enough* useful knowledge is debatable. A handful of tests would increase confidence in one or two designs whose development was already largely completed (e.g., perhaps a boosted weapon design), without necessarily establishing sufficient confidence or allowing refinements to be made. A much larger series of test (perhaps 20 to 30) over a long period (say, a decade) would be required to demonstrate the performance and safety of more advanced designs, notably of thermonuclear warheads. Any series of tests conducted by India would be subject to intense internal and external scrutiny. Any failures, particularly in a short series, could therefore damage the prestige of the Indian weapon program and of the institutions charged with technological development. A prerequisite for testing, ironically, is that there should be confidence that the designs would work: this would tend to confine the tests to conservative designs whose testing may be inessential.

Secondly, India is more likely to "get away with it" if the test series is short and time-limited, and if tests are conducted before the CTBT gains many ratifications and before the proposed conference in 2000. India's announcement of a test series preparatory to joining the CTBT would place the international community in a con-

siderable bind. India could rightly point out that both France and China had conducted their final tests without incurring sanctions from the governments of either NWS or NNWS. It might also calculate that one or more Indian tests might destabilize the CTBT, obstructing ratification in other parliaments. Equally, however, such actions by India might increase the treaty's prestige, as occurred during the French tests in 1994-95.

Thirdly, irrespective of scale and timing, the consequences of test explosions for India are beyond calculation. How would Pakistan, China, Japan, the United States, and other countries react, and what would be the Indian public's reaction to those reactions? Notwithstanding the French and Chinese precedents, would formal or informal economic sanctions be imposed (why would the history of discrimination against India be breached in this instance?)? Could the policy of preparing an "option to go nuclear" be reinstated after a series of tests, or would the tests lead inexorably towards deployment, especially if they were matched by Pakistan? In view of India's longstanding opposition to nuclear testing, how would its *volte-face* affect the manner in which future Indian proposals in this and other fields of international relations were regarded? One can add many other questions, and none has clear answers.<sup>33</sup>

For the above reasons, testing therefore seems injudicious by most reckonings. Despite these drawbacks, it is still conceivable that, especially if India were pushed into a corner and passions were raised, it would throw caution to the wind and launch a series of tests. In the short run at least, an Indian government would win popularity from such defiant actions.

### Maintaining the Status Quo

Faced with the CTBT, the most comfortable position for India might have been to stand its ground, neither testing nor renouncing testing, and await the outcome of the NPT review process before making any further decisions. In this way, the traditional stance of maintaining its "option to go nuclear" might have been preserved untarnished, at least for a domestic audience. However, the CTBT's entry-into-force provision invalidates this approach. Three possible alternatives remain: a) India could join the CTBT and commit itself after all to the renunciation of nuclear explosive testing; b) India could stay outside the CTBT, thereby preventing it from entering into force, but the treaty would attain near-universal

membership and its norms would be fully established (although their observance could not be properly verified); or c) India could stay outside and the treaty might collapse.

The results of the first two possibilities would, in terms of practical restraint, be similar for India. If the international norms against testing strengthened further, with or without the CTBT's entry into force, it would be extremely difficult for India to defy them. India would then have to ask itself whether a technology strategy could be devised that would offer the prospect of credible deterrence without testing.

A credible and durable deterrent could probably be maintained against Pakistan without testing, but it would be much more difficult to establish a credible deterrent against China or another foreign power where great distances were involved, or a high degree of sophistication were required. In general, the emphasis would probably have to shift towards larger rockets and bulkier payloads. This might in turn require a more extensive rocket testing program, which has its financial and political costs, and larger stocks of fissile material than might have been needed if miniaturization had been feasible.<sup>34</sup> Come what may, India would be limited to second-best solutions. Would it be content with this? Would a nuclear weapon program that was so limited maintain its prestige within India and therefore justify its expense? It is doubtful.

If no testing were possible, it is likely that Indian nuclear R&D would wither on the vine. It would gradually lose prestige and resources, and thus lose momentum. India would probably have to acclimatize itself to possessing a capability that would only have utility in the Indo-Pakistani context. Through this outcome, the test ban would have an important consequence. By inhibiting nuclear deterrence against China but maintaining it against Pakistan, the "problem" would tend to be decoupled from the strategic relations among the established NWS. Solutions might be easier to find in these circumstances.

The possibility that India would not join the CTBT and that the treaty might collapse is, in some ways, the best of all outcomes for India. Its options would again be wide open. It must be tempting for India to try to engineer this outcome, by creating conditions in which ratification by other states is thrown into doubt, by frustrating entry into force, and by encouraging dissension within and among the NWS on issues of substance and

tactics. However, such an approach would be fraught with danger. It is seldom advantageous to act in international diplomacy as the spoiler at the party, unless the spoiler has the authority and prestige, and ultimately the allies, to limit the repercussions. Furthermore, is it truly in India's security interests to lift the roof on nuclear testing, or to see the nonproliferation regime seriously undermined as would surely be the consequence?

The conclusion to be drawn here is that India has some possibilities for maintaining its "option to go nuclear," but they are limited. All seem to risk leaving India isolated, unpopular, and without an impressive nuclear deterrent.

### Stretching towards a New Paradigm

If a policy of tactical adaptation—of ducking and weaving—cannot work, one of two things can happen. Either a state can continue trying to make it work, in the hope that at best it will escape its predicament through its own ingenuity or some external developments that will act to its advantage, or at worst it can put off the day of reckoning. Alternatively, it can seek new approaches which, even if they do not amount to total departures from previous positions, entail a significant change in interpretations of the security situation and, especially, in how to address it. This involves a cognitive shift—an openness to new interpretations of security situations, a deliberate search for new ideas and solutions, and a process of learning how to apply them in a given context.

What is striking about India's nuclear paradigm is, on the one hand, its allegiance to a hard "realist" view of the international system and, on the other hand, its allegiance to the vision of an ideal world that is shorn of nuclear weapons. Given its unhesitating acceptance of the Chemical Weapons Convention, which aims to achieve the total elimination of chemical weapons, there is no reason to doubt the sincerity of its desire for complete nuclear disarmament.<sup>35</sup> However, India has little to offer in between, for its own security or that of others, and little vision of what might lie in between and how it might manage the in-between. In particular, it has so far failed to develop a set of policies that blends collective security with the traditional threat of the use of force.

One reason is that the nuclear nonproliferation regime, together with India's non-alignment, have placed obstacles in the way of adopting such an approach. Compared to France—which is involved in NATO and enjoys

legitimized access to nuclear technology (due to its test of a nuclear device before January 1, 1967)—India has not been able to enjoy such benefits. As such, its task of finding a middle course is much more difficult. As we have seen, the NPT Extension Conference's "Principles and Objectives" appear to provide even less room for maneuver: they bind states parties to the NPT to an uncompromising commitment to end the nuclear weapon programs in the non-NPT threshold states and to allow no concessions until that is achieved.

New paradigms and new solutions tend to emerge when new questions are given ascendancy. Allowing those questions to be posed, and granting them priority over previous questions, are the vital but difficult first steps. Furthermore, international perceptions that those questions *are* being asked with high seriousness, and that Indian politicians, officials, and defense analysts *are* seeking alternative solutions, would have a substantial effect on the climate of relations with India, opening doors to compromise and innovation.

In India's case, everything can be boiled down to two basic questions: how can India gain political, military, and psychological security without giving preeminence to the development of nuclear weaponry?; and how can a cooperative (rather than an adversarial) relationship be established between India and the nonproliferation regime's adherents?

Four observations provide keys to unlocking the answers to these questions:

The first can be stated flatly: India's renunciation of nuclear weapons is not in the cards in the foreseeable future. This has to be accepted. Irrespective of its relations with China, or its concerns about "nuclear apartheid," its renunciation of nuclear weapons could only follow success in establishing an effective arms control process with Pakistan. Such a move would probably have to go hand-in-hand with the establishment of more "normal" politico-economic relations between India and Pakistan. All this would take time, and is most unlikely to be achieved by the end of the century.<sup>36</sup>

The second observation is that India's relations with China, and China's own approach to nuclear arms control and disarmament, are fundamental to a resolution of these problems. The two nations' approaches to international security have been rather similar, even if the Gandhian idealistic tradition is absent in China's case. Both have placed considerable reliance on *realpolitik*, and

in some measure on non-alignment, rather than on collective security. While China continues to lean in the former direction, there has been, however, a definite movement in the latter direction, especially in the nuclear arena (as indicated by its support for the NPT and CTBT and by its efforts to establish proper export controls). Furthermore, China appears to have capped its nuclear weapon program so that, although its arsenal is undergoing modernization, it is not expanding. And more broadly, the growing integration of China into the global economy seems likely to create constituencies in China that will favor “softer” approaches to international security.

A nuclear test ban would limit India’s ability to mount an effective nuclear deterrent against China. The question is whether China can find the resolve to reduce the significance of this event for India’s perceptions of its long-term security. Rather than sitting back and enjoying the reduction in India’s “latent power,” could it take this opportunity to establish a relationship with India that would effectively take nuclear weapons out of the equation, or at least consign them to the margins? One can express this in more exalted language. Given that both India and China are destined to be great powers in the coming “Asian century,” can a stable security relationship be established between them at the outset that is not based on military confrontation in general or the large-scale deployment of nuclear forces in particular?

The choices for China are already evident in the context of the CTBT’s entry into force. It has three options in regard to India. One is to ignore it. Another is to make life as difficult as possible for the Indian government, notably by signing and ratifying the treaty—possibly using its political muscle to bring Pakistan on board—and thereby ensuring India’s diplomatic isolation and thus weakness. A corollary is that India may invite opprobrium *and* deliver the Chinese government’s best outcome: the test ban would still have effect, but multilateral verification measures (especially on-site inspection) which China dislikes could not be implemented. The third option is that China could work with India and other powers to develop the conditions under which India might be prepared to live with China’s nuclear advantage, and thus to accept the CTBT.

Despite a brief rift in 1986-87, the Chinese and Indian governments have established an increasingly cordial relationship in the 1980s and 1990s. Regular meetings are now held between Indian and Chinese political lead-

ers and between senior officials. Considerable efforts are being made to resolve the border disputes that have bedevilled their relations since the late 1950s. There are also signs that China has become increasingly concerned about the consequences of the nuclear competition between India and Pakistan for its security and foreign relations. For instance, its assistance to Pakistan has begun to cause serious problems in its relations with the United States, problems that could become more serious still if Pakistan were provoked into using Chinese technology in its response to Indian test explosions or missile deployments.

Could China and India therefore bring themselves, or be enjoined, to develop a much wider understanding, ideally enshrined in a treaty, that would provide confidence on both sides that nuclear weapons would not be developed, deployed, or used against one another? One could imagine a Sino-Indian treaty embracing pledges on deployment, security assurances, transfers to third parties, and “no-first-use” together with bilateral confidence-building measures. Might this be placed high on their respective agendas in the next three years, so that the new century might open with such an agreement in place or at an advanced stage of negotiation? Might that in turn pave the way for India’s acceptance of the CTBT in the year 2000?

This may be too much to ask, given the complexity of relations between Beijing and New Delhi. However, the point to stress is that a shift in India’s nuclear policies is not easily envisaged without a dialogue between the two nations and without movement in China to lessen India’s political and security concerns over the uses to which China’s nuclear capabilities might be put.

The third observation is connected to the first. The NPT is constructed around a binary world of NWS and NNWS, the former category being limited to the five members that conducted nuclear explosions before 1967. It is uni-directional, in that countries can only join the treaty as NNWS whose nuclear facilities and materials are placed under full International Atomic Energy Agency (IAEA) safeguards. As the nonproliferation regime has developed, it has become increasingly intolerant of non-parties to the NPT, and especially of countries with unsafeguarded activities that have become the objects of institutionalized discrimination. This is evident in the field of nuclear trade. Under the Nuclear Suppliers Group guidelines, the application of full-scope safeguards to a country’s materials and facilities has become

a condition for trade, a condition that was endorsed by the NPT parties in the 1995 “Principles and Objectives.” As a result, India is being subjected to a wide-ranging embargo on nuclear transfers.

If India continues on its current path and shows no willingness to find new solutions, few concessions can and should be made in this regard. The international norm of full-scope safeguards has been hard won and is too precious to be deviated from without large security benefits. However, what is supposed to happen if India (and Pakistan) *cannot* contemplate renouncing nuclear weapons or bringing all of its activities under nuclear safeguards, but nevertheless wishes to take decisive steps towards making “nuclear peace” with its neighbors and the international community? That is, what happens if its goal is to bring about a stable and non-threatening security environment, but one that requires the retention of a measure of non-weaponized deterrence, at least until a sounder regional and global framework for complete disarmament has been established? In regard to India and Pakistan, this is arguably the most sensible and realistic goal that can be entertained at this stage.

In these circumstances, should India be kept indefinitely in solitary confinement outside the nuclear trading system? Subject to certain conditions being attached to trade, the answer is surely no: an indefinite embargo would run against the international community’s, let alone India’s, energy, environmental, and security interests. Firstly, nuclear power presently comprises less than three percent of India’s electricity generating capacity, and its reactors are among the least efficient in the world. This capacity will need to be improved and increased if the coming great expansion in electricity production in India is not to be provided mainly by fossil fuels. Secondly, the embargo strengthens the very grievances that underpin India’s antagonism to the nonproliferation regime. Besides the pain of denial, Indians can see the world’s nuclear traders scrambling to do business with China, even to the extent of selling it centrifuges for enrichment plants; and it can see an increasingly vibrant Chinese civil nuclear industry being established through transfers from foreign technology holders, while India’s own industry languishes. Where is the justice or logic in this?

The point to be stressed here is that decisions on whether or not to trade with a country should be sensitive to the *direction* in which its policies are moving, and

not just be conditional upon a final state of grace being achieved. Although a formal solution along the lines of the Korean Peninsula Energy Development Organization is not applicable in the Indian case, the Agreed Framework between the United States and North Korea makes just this linkage between the availability of technology and movement towards a security goal. Furthermore, one can better afford to create exceptions to rules when there is near universal adherence to them.<sup>37</sup>

If India (and Pakistan) demonstrate through deeds as well as words their intent and determination to find solutions, there is therefore a case for supplier nations collectively to reconsider the constraints on trade with them. The most sensitive technologies might remain embargoed, but items such as nuclear power reactors and low-enriched uranium might again be made available.

The fourth observation is that the chances of solving the “Indian problem,” of bringing the CTBT into force and successfully negotiating the FMCT, and of preventing damage being done to international nuclear relations by India’s defiance, will be greatly diminished if the NWS sit back on their haunches and take no further steps in the direction of nuclear disarmament. In the past two years, the perception has gained ground that the NWS are simply retrenching and modernizing. Granted, they have reduced the numbers of warheads in their inventories, ended explosive testing, and reduced their arsenals’ readiness, but in other respects it is “business as usual”—the past decade’s arms reductions have simply led to a “re-crystallization” of the NWS’ nuclear deterrents.

This affects the Indian situation in a number of ways. The common view in India is already that the NNWS have been duped by the NWS into extending the NPT indefinitely and accepting a text of the CTBT that does little to weaken the NWS’ nuclear capabilities. If all the evidence supports this view, the Indian government may be even less prepared to depart from its current nuclear policies and will be encouraged to procrastinate in the hope that the NPT review process will go badly, bringing it diplomatic possibilities for recovering lost prestige. Furthermore, those in India who would like to undermine the NPT’s authority may feel emboldened by the failure to make progress with nuclear disarmament and may be led to believe that their actions against the treaty are eventually likely to succeed.

My view is that this is just a pause before a new phase of arms control and arms reductions begins. This may

turn out to be wishful thinking, but the shift by great powers away from using nuclear weapons as instruments of international politics seems likely to continue. It is being driven *inter alia* by momentous developments in technology, which are changing the nature of economic and political-military relations, and by the cumulative strengthening of international norms against the threat or use of nuclear weapons. Furthermore, the political and economic situations in the NWS—including Russia’s difficulties in sustaining its nuclear arsenal even at the levels envisaged under START II, the election in the coming few months of governments in the United Kingdom and United States that may seek new gains in nuclear arms control, and the continuing opening of China to foreign trade and discourse—may soon allow fresh initiatives to be taken. In addition, there is a new threat that may encourage all states to regard nuclear weaponry and the means of their production with an increasingly jaundiced eye: the possibility that terrorist groups or other sub-state actors might resort to using weapons of mass destruction.

Even if this optimism turns out to be justified, this opinion will not be worth much in the difficult few years that lie ahead if the NWS send no convincing signals that they are committed to taking matters forward. Rather than the threshold states, it is now the NWS that are most guilty of practicing ambiguity. Their lack of clarity over long-run intentions is arguably the most corrosive factor at play in the current situation. Where India is concerned, their refusal to allow stronger wording on disarmament in the CTBT’s preamble or to permit the CD to establish a subcommittee on disarmament has left the government poorly positioned to marshal support for a diplomatic retreat. But the frustration is not confined to India. A dangerous cynicism is developing among NNWS which the NWS would be foolish to ignore as the NPT review process gets under way. This said, everyone has to recognize the very considerable political and instrumental difficulties of achieving nuclear disarmament, and to avoid oversimplifying the tasks that lie ahead and underestimating the time and resources required to carry them out.

As we have seen, Indian efforts to force the issue, by linking its accession to the CTBT to time-limited disarmament, are unlikely to be successful, despite its being handed greater leverage through the CTBT’s entry-into-force provisions. However, progress towards disarmament, and the delineation of the stable “end-state” that

will constitute disarmament, *are* important to the outcome of this particular drama.

## CONCLUSIONS

In Egyptian and Greek history and mythology, a labyrinth was a fabulous but ominous building from which there was no simple escape. It was full of blind alleys, a monument to frustrated hopes. Furthermore, the labyrinth was constantly being elaborated and extended so that escape from it always seemed to be becoming more difficult.

This seems an apt metaphor for the situation in which India, and the international community, now find themselves. There is no simple route out of the Indian nuclear labyrinth, or indeed out of the more extensive labyrinth that other more powerful states have built. But a determination to escape and a willingness to abandon favorite paths and move in novel directions are the prerequisites for finding an exit.<sup>38</sup>

This analysis suggests that there is unlikely to be any escape from the labyrinth unless: a) the Indian political elite is prepared to accept major changes to the “paradigm” that has dominated Indian thinking on nuclear weapons for three decades; b) a cooperative rather than an adversarial nuclear relationship is established between India and foreign powers, and between India and the non-proliferation regime; and c) the NWS engage seriously in developing further arms control and nonproliferation measures beyond the CTBT and in the pursuit of nuclear disarmament.

Imagine that we have moved forward 10 years. What would represent a “good outcome” to the current impasse? In my view, it would encompass four achievements, in no particular order of importance (Indian and Pakistani membership in the NPT is being ruled out in this time-frame):

1. *Sino-Indian relations.* A security treaty would have been negotiated and implemented by the governments of China and India. It would provide assurances that nuclear weapons would not in any way be developed or used (militarily or politically) against the other party, together with measures to give confidence that these assurances were being honored.
2. *Indo-Pakistani relations.* India’s and Pakistan’s respective nuclear warhead and missile programs would have been capped, and IAEA safeguards would be applied to their enrichment and reprocessing facili-

ties and to fissile materials that were not held in the capped military stocks. These steps would have been accompanied by agreements on the readiness of their “non-weaponized deterrents,” and by transparency and confidence-building measures.

3. *Cooperative relations with India.* Trade flows and technology transfers between the world’s major space and nuclear power programs and their Indian counterparts would have resumed, with denials only being maintained in regard to the most sensitive technologies. A cooperative relationship would also have been established in regard to various aspects of arms control, nonproliferation, and disarmament policy. India would be more involved in cooperative security arrangements than in previous times.

4. *Progress in nuclear arms control and disarmament.* The CTBT and FMCT would have entered into force, and a post-START II phase in nuclear arms reductions would be well under way. The whole international community would be engaged in detailed discussions on how to bring about nuclear disarmament and on how to do so in a way that would increase rather than decrease regional and global security.

Other observers will have their own lists of “best outcomes.” What is important is that the next few years are not squandered in conflict and recrimination. At present, there is intransigence on all sides. India is in a defiant mood, and the NWS do not seem prepared to come forward with clear policies on nuclear disarmament. Everyone’s security is being jeopardized as a consequence.

Come the year 2000, it is vital that a sense of direction should have been established so that the Indian, Pakistani, Chinese, and other governments have confidence that the problems discussed here are being overcome. The exit from the labyrinth should be in sight, if still at some distance away.

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<sup>2</sup> For want of a better term, “paradigm” denotes a set of conceptual and instrumental assumptions held, in this context, by a country’s political, administrative, and scientific elite.

<sup>3</sup> For histories of the Indian nuclear program, see Ashok Desai, *India’s Nuclear Option* (New York: Praeger, 1976), Raju G. C. Thomas, *Indian Security Policy*

(Princeton, N.J.: Princeton University Press, 1986), Ziba Moshaver, *Nuclear Weapons in the Indian Subcontinent* (London: MacMillan, 1991), and Chris Smith, SIPRI, *India’s Ad Hoc Arsenal* (Oxford: Oxford University Press, 1994). The best history of Indian science and technology policies which influenced the nuclear development program is Balraj Nayer, *India’s Quest for Technological Independence: Policy Foundation and Policy Change* (New Delhi: Lancers Publishers, 1983).

<sup>4</sup> Mahatma Gandhi, “Atom Bomb and Ahimsa,” *Hanju* (Poona), July 7, 1946. Quoted in Aabha Dixit, “Status Quo: Maintaining Nuclear Ambiguity” in David Cortright and Amitabh Mattoo, eds., *India and the Bomb: Public Opinion and Nuclear Options* (Notre Dame, Indiana: University of Notre Dame Press, 1976).

<sup>5</sup> For a Chinese perspective, see Wang Hongyu, “Sino-Indian Relations: Present and Future,” *Asian Survey* 35 (June 1995), pp. 546-554. An excellent history of the border dispute can be found in Xuecheng Liu, *The Sino-Indian Border Dispute and Sino-Indian Relations* (Lanham: University of America Press, 1994).

<sup>6</sup> In particular, China has agreed to supply low-enriched uranium for the Tarapur reactor, which has been effectively embargoed by U.S. and European suppliers due to India’s refusal to accept full-scope safeguards.

<sup>7</sup> Little has been written about Sino-Indian relations. Exceptions are A. Whiting, *The Chinese Calculus of Deterrent: India and Indo-China* (Ann Arbor: University of Michigan Press, 1975); and Gary Klintworth, “Chinese perspectives on India as a Great Power,” in Ross Babbage and Sandy Gordon, eds., *India’s Strategic Future* (London: MacMillan, 1992).

<sup>8</sup> However, China could now be regarded as exerting indirect pressure on India through its advocacy of an entry-into-force clause in the CTBT which required Indian ratification.

<sup>9</sup> On non-weaponized deterrence, see George Perkovich, “A Nuclear Third Way in South Asia,” *Foreign Policy* 91 (Summer 1993), pp. 85-104.

<sup>10</sup> More than this, Jasjit Singh has argued that “Any move towards making the nuclear arms control process explicit and techno-legal (as compared to the present political-strategic) would require an overt acceptance and formalizing of the nuclear weapon status of the three countries [China, India, and Pakistan]. This will tend to remove most of the current restraints, and could prove counterproductive in the long run. Desire for regional arms control should be tempered with this reality.” See Jasjit Singh, “Arms Race in the Region: Myths and Reality,” *Strategic Analysis* 18 (August 1995), pp. 595-609.

<sup>11</sup> On the history of and need for confidence-building measures between India and Pakistan, see Aabha Dixit, “India-Pakistan: Are Commonly Accepted Confidence-building Structures Relevant?” *Security Dialogue* 26, No. 2 (1995), pp. 191-203.

<sup>12</sup> Whether they could publicly admit to asking these questions in the current climate is another matter.

<sup>13</sup> Did India receive foreign assistance before 1974? The story has not yet been told.

<sup>14</sup> Assuming that it has produced tritium in its heavy water reactors, India may also have sufficient confidence that it could manufacture a reliable boosted fission device, albeit without being certain of the yield.

<sup>15</sup> “Perfecting the design of an optimal yield-to-weight, two-stage thermonuclear design for long range missile delivery, with a yield of several hundred kilotons, has in the past required—and some would argue can only be achieved with—at least partial yield testing of the secondary component. This is one of the primary technical reasons why the CTB remains an important arms control measure.” Thomas Cochran and Christopher Paine, “The Role of Hydroneuclear Tests and other Low-Yield Nuclear Explosions and their Status under a Comprehensive Test Ban,” *Nuclear Weapons Databook* (Washington, D.C.: Natural Resources Defense Council, March 1995), p. 9.

<sup>16</sup> This assessment has recently been shared by a number of Indian analysts. See, for instance, P. R. Chari, “Moment of Truth,” *The Hindu*, January 3, 1996.

<sup>17</sup> This is also partly a consequence of an under-formed policymaking process. Amitabh Mattoo observes that “Decision-making on nuclear issues in India is complex and obscure. No agency or department is solely responsible for coordinating policy formulation on key security issues, including the nuclear one.” See Amitabh Mattoo, “India’s Nuclear Status Quo,” *Survival* 38 (Autumn 1996), p. 43.

<sup>18</sup> See, for instance, Moshaver, Chapter 1.

<sup>19</sup> As so often in history, an egalitarian ideology which is promoted for serious and practical reasons also masks—or can be used to mask—a desire to wrest power from, or exert power over, the nations, institutions, or individuals which are the objects of attention.

<sup>20</sup> Among numerous articles in the Indian press on this theme during the CTBT's negotiation, see Brahma Chellaney, "CTB Plan: will America pull off a second coup?" *The Hindu*, December 20, 1995, and C. Reja Mohan, "CTBT and nuclear hegemony," *The Hindu*, January 18, 1996.

<sup>21</sup> Indian political and military analysts keep a close watch on developments in the policies and activities of the NWS, and especially of the United States. See the discussion, for instance, in G. Balachandran, "CTBT and India," *Strategic Analysis* 18 (June 1996), pp. 493-506. This has made them particularly alive to the hypocritical stance that is often adopted by the NWS in regard to the possession of nuclear weapons (they are good for us and thus for international security, and hence we are justified in maintaining weapon support programs, but they are bad for you and you must therefore desist from such activities). However, this also frequently leads Indian analysts to pay too much attention to the pronouncements of weapon developers and military strategists in the NWS, and too little attention to the large constituencies which are committed to the development of multilateral instruments of restraint for reasons that go beyond interests in power maximization. In my experience, they also usually ignore the substantial interests and influence of non-nuclear weapon states in regard to the development of nonproliferation policies.

<sup>22</sup> In September 1996, 182 NNWS and five NWS were parties to the NPT. Of the eight countries outside the NPT, three (Angola, Djibouti, and Oman) are currently taking steps to join the treaty.

<sup>23</sup> The "Principles and Objectives" were enunciated and approved at the 1995 NPT Extension Conference.

<sup>24</sup> The best discussion of the interplay between Indian domestic politics and decision-making in nuclear and other security fields can be found in Shekhar Gupta, *India Redefines its Role*, Adelphi Paper No. 293 (London: International Institute for Strategic Studies, 1995).

<sup>25</sup> An opinion poll carried out in 1994 found that a small minority (six percent) considered the nuclear issue to be one of the two most important facing the country. However, only 8.5 percent of those canvassed favored India's renunciation of nuclear weapons, while 58 percent were supporters of the "official policy of ambiguity," and 33.5 percent favored weapon acquisition. See Cortright and Mattoo, Appendix A, pp. 109-116.

<sup>26</sup> There are, however, dissenting voices. See, for instances, Praful Bidwai, "The case for a CTBT: India must seize the moment," *The Times of India*, January 12, 1996; and Achin Vanaik, "Standing on zero ground," *The Hindu*, January 15, 1996.

<sup>27</sup> This is especially evident in the U.S. government, non-governmental organizations, and in U.S. foundations that support research on nuclear nonproliferation policy (although the effort or desire to improve understanding has not been universal).

<sup>28</sup> Others would no doubt worry about the difficulties in crisis management that would be caused by another addition to the ranks of nuclear powers.

<sup>29</sup> This said, India's containment, by various means, has probably been turned into a higher-order geopolitical issue by its campaigns against the CTBT and the NPT's extension.

<sup>30</sup> The proposal is explained, for instance, in the statement by Ambassador Arundhati Ghose to the U.N. Conference on Disarmament, Geneva, February 15, 1996.

<sup>31</sup> India has announced that it will not sign the CTBT "in its present form." See the statement by Ambassador Arundhati Ghose in the Plenary Meeting of the Conference on Disarmament, Geneva, June 20, 1996.

<sup>32</sup> Article XIV.2, Comprehensive Test Ban Treaty, U.N. Conference on Disarmament, CD/1427, Geneva, August 22, 1996.

<sup>33</sup> One might imagine clever tacticians stage-managing a pair of nuclear tests apiece in India and Pakistan prior to their accession to the CTBT. They might thereby quench public opinion in both countries and prepare the ground for "detente" in Indo-Pakistani nuclear relations, leading to the capping of their programs and the maintenance thereafter of a permanent state of "recessed deterrence," accompanied by increased transparency and verification. However

appealing this prospect, it seems implausible that India, Pakistan, or any other powers could arrange such events or agree on their aftermath.

<sup>34</sup> This might make India still more nervous about the pending negotiation of a fissile material cut-off treaty.

<sup>35</sup> The universal ban on chemical weapons also shows that India and Pakistan can cooperate when they choose. On August 19, 1992, the Indian and Pakistani governments issued a joint declaration supporting the complete prohibition of chemical weapons.

<sup>36</sup> This does not mean that the eventual goal of a non-nuclear southern and central Asia, and more broadly of a non-nuclear Asia, has to be discarded. Rather, that it has to be achieved in stages.

<sup>37</sup> Full-scope safeguards are mandatory for NNWS parties to the NPT and are upheld by INFCIRC/153 agreements with the IAEA. With only eight nations remaining outside the NPT, they are approaching universality.

<sup>38</sup> One of the author's correspondents suggested that another way of getting out of a labyrinth is to stand still and scream for help, in the hope that there is someone around who knows where the exit is and will guide the lost person towards it. He went on to suggest that this option gave rise to another strategy (a misguided one in his view) for external powers in India's case: take steps to make the labyrinth as forbidding and enveloping as possible in the hope that India will eventually let out its scream and accept guidance out of the labyrinth on almost any terms.