South Asian Security and International Nuclear Order

Creating a Robust Indo-Pakistani Nuclear Arms Control Regime

Mario Esteban Carranza

SOUTH ASIAN SECURITY AND INTERNATIONAL NUCLEAR ORDER

...well-researched, and insightful survey of India and Pakistan's bipolar relationship with the atom bomb before and after their fateful nuclear tests of 1998. Taking on the conventional wisdom that Indian and Pakistani nuclear weapons have brought stability to the region, Carranza's analysis provides a sobering reminder that these two nations' nuclear arsenals have created far more risk than reassurance, especially in the absence of effective progress on arms control and disarmament. Invaluable for anyone trying to understand the region and its enormous challenges.

Daryl G. Kimball, Arms Control Association, USA

To my wife, Olga, who made this book possible, and

To the memory of my mother

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MARIO ESTEBAN CARRANZA
Texas A&M University-Kingsville, USA

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Contents

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Foreword
An Ever-thicker Shadow

Unlike other momentous events, whose immediate effects usually dissipate with time, the Indian and Pakistani nuclear tests of May 1998 cast an ever-thicker shadow. As other countries look to emulate the most successful acts of nuclear proliferation since 1964, the consequences of those eleven detonations only grow, as does the need for action.

More than any previous analyst of South Asian nuclear proliferation, Mario Carranza expresses the pain of the international disarmament community, blatantly misled and betrayed. Indian policies, long justified on principles of universal nuclear disarmament, were revealed as undiluted self-interest. After the initial shocks of May 1998, adjustment to the new situation was eased by the endless rounds of Talbott-Singh dialogue, allowing the rest of the world gradual accommodation to a situation it was powerless to change. The casualties of this process included not only hope for regional nuclear disarmament, but a cynical pall cast over any government's advocacy of disarmament. Alva Myrdal's rebuke from two decades before never stung deeper than when exposed to such duplicity. With every government playing only the Game of Disarmament, civil society was well and truly alone.

While disarmament advocates felt like dupes, neo-conservatives were reaffirmed. When India switched from paragon of the global left to hero of the right, it made a bid for power over principle, trading the remnants of Gandhism for great power aspirations. It is no wonder that Bill Clinton's subtle hands were brought in to midwife the transition. But even the American right, which looked upon India as a strategic counterweight to China, did not have the stomach for outright applause. Rather, America offered acceptance to nuclear India. And India was unwilling to give America more than acceptance itself, refusing to buy American military equipment, contribute to war in Iraq, or open its facilities to war in Afghanistan. Instead of moving adroitly for mutual benefit, America and India continued to hover indecisively.

For Pakistan, always a half step behind, the transition was easier and the rewards initially greater. In an environment where nuclearization always seemed to matter more than its consequences, Indian leaders never seemed to care much about the effect of their nuclear tests. Granted strategic parity by its nominal adversary, Pakistani state was more secure than any time since partition. Yet the following years revealed that the state was weaker than widely assumed and nuclear weapons did nothing to assure national security against the country's most dangerous enemies. While Islamabad probably had to show off its bombs after

India resumed testing, the benefits were fewer than hoped and the risks have only continued to worsen. Ironically, India now faces enormous nuclear dangers from Pakistan, risks the Pakistani state is hard pressed to control.

In the measured language of social science, Carranza records this transformation and examines its consequences. An outsider to the cozy South Asian strategic community, he brings the badly needed insight and freshness. He implicitly rejects the caricature of classic realism that has become South Asia's conventional wisdom. Not immutable pressure of systemic imperatives, but domestic choices guided decisions for both India and Pakistan. Even China is a background element here; playing more of a role by helping Pakistan rather than alarming India. Even in the age of nuclear missiles, the Himalayas are amazingly high; South Asia is South Asia. Carranza's conclusions are pessimistic, reaffirming suspicions that 'nuclear deterrence in the subcontinent is an impossible game'. And the case he builds for forthright action is irresistible.

No one can be satisfied with the South Asian nuclear situation. India in particular was disappointed by its overt nuclearization. Joining the 'nuclear club' it long reviled, it received not acceptance but resentment. Its capabilities were accepted begrudgingly, destined to always be introduced with regretful adjectives. Nuclearization did not bring India great power respect. That came from economic globalization, just as American perceptions were shaped not by the bomb but a new era of commercial engagement and the prominence of second-generation immigrants. Pakistani nuclearization, always more narrowly conceived, was much more successful. Fully aware it could never win global respect, Pakistan sought only balance and was rewarded with a share of the symmetry it otherwise would be denied by its social stagnation, educational inferiority and economic malaise. But balance with India came at a grievous price of perpetual domestic paranoia, a rational response to the dangers of deterrence breakdown and domestic instability. It is no wonder India is trying to leap to missile defense, implicitly acknowledging that nuclearization has not solved its problems.

Carranza sees America as a major element in South Asian nuclear stability. Is it essential, though? Certainly many American leaders do not see their role that way. America has a role in South Asia, even needs created by war in Afghanistan. But its nuclear role is neither balancer nor advocate. Oddly, America continues to treat South Asia with historical detachment. Its engagement today is not the direct result of nuclearization but a by-product of war in Afghanistan. Hesitation to maneuver in the withering ground between India and Pakistan—easy enough to understand, having never won South Asian praise—is unlikely to yield to forthright action. Only an outright nuclear crisis is likely to affect such predispositions.

But the regional stakes are too great to be overlooked. Unlike all but a few South Asian commentators, most of whom refuse to acknowledge any link between international acceptance of regional proliferation there and effects elsewhere, Carranza sees endless knock-on effects. South Asia, he shows, is not in a bottle. The Bush administration missed an enormous opportunity when it legitimated

Indian nuclear policy in 2008 without insisting on recommitment even to the principles of the NPT.

Not that Islamabad or New Delhi made it easy. By consistently refusing to accept responsibility for their own actions, India and Pakistan portray themselves as virtual by-standers in a world run by powers far greater. The irony is unavoidable. They are self-described nuclear eunuchs, trying to appropriate what Reinhold Niebuhr once called *innocence*, a quality he reminded his readers that no state was allowed. But the language of innocence may be irresistible. New nuclear powers have been shown a preferred path to legitimacy, a path that some can be guaranteed to follow.

South Asia should compel us to think much self-consciously about what Carranza calls International Nuclear Order. Instead of dealing with proliferation piecemeal, everyone will be much safer if we return to the strategic thinking that brought the NPT into existence. Above all, Carranza shows, this means the obligation to restore credibility to nuclear disarmament.

It is here that American initiative is most needed and potentially most influential. American power—withered by wretched strategic choices, the inevitable effects of globalization and the blow of economic depression—is not what it was. But nor is any replacement on the horizon. Carranza constantly shows there is no clear alternative to American leadership. The effect of a couple editorials by long-retired American foreign policy leaders in 2007–2008 is especially striking. After a decade in the freezer, nuclear disarmament is back, kind of. International civil society is no longer alone. With the White House busily salvaging an economy on the precious of its own disaster, though, the Obama administration can be excused for overlooking less exigent problems. One can only hope that its foreign policy leaders are allowed the freedom to act assertively. Their hands will be much stronger if joined by others. Other greater powers need to get involved, as they have to some effect in the EU-3 process with Iran and the Six Party Talks with North Korea. India does not belong on a list of nuclear pariahs, although Pakistan undoubtedly does, but both are too important to be denied the same concentrated consideration.

In lieu of a South Asian nuclear crisis, the least desirable option, momentum must start outside the region. Ratification of the Comprehensive Test Ban and Fissile Material Cut-off Treaties would create unprecedented pressure on South Asian leaders too. But the most important decisions over regional nuclear weapons are regional. Instead of accepting Indian claims that disarmament leadership is up to Washington, Carranza argues responsibility is as individual as the act of proliferation itself. As the dominant actor in the region, India bears special responsibility. China has forsworn first use, shown willingness to talk and offer concessions. Pakistan declares its willingness to follow. That leaves it up to India to explain what kind of deal it wants.

Carranza reaffirms the conclusion of constructivist research that the most important actors in South Asian nuclear developments are strategic enclaves, the engineering communities who dictated preferences since the early 1970s.

In the past they could be put off, but never denied. Appropriating the language of nationalism and security, they always got what they wanted eventually. It is fatuous to think the communities that produced bomb designer/advocates like Raja Ramanna and Abdul Qadeer Khan will convert to restraint. Political reassertion is a better bet. Mario Carranza has written a richly informative and original review of the problems to be overcome. His greatest service may lie in showing where to act.

Aaron Karp, Norfolk, Virginia

Preface and Acknowledgements

This book challenges the conventional wisdom according to which the United States 'must' accept the nuclearization of South Asia. It is a modest contribution to the ongoing debate on the need to make progress toward global nuclear arms control and disarmament. I hope that it will help to bring nuclear non-proliferation and disarmament back in to US policy toward South Asia.

I am indebted to the College of Arts & Sciences at Texas A&M University-Kingsville for a one-semester sabbatical leave in Fall 2008 that offered me uninterrupted time to think anew about the complexities of Indo-Pakistani nuclear relations and South Asia's nuclear predicament. I am grateful to my colleague and friend, Stephen P. Cohen, who invited me to be a Guest Scholar at the Brookings Institution in Washington DC during my sabbatical. Brookings provided a wonderful and stimulating intellectual environment and gave me the opportunity to discuss the Indian and Pakistani nuclear weapons programs and the US-India nuclear deal with Steve Cohen and Dhruva Jaishankar. I am especially grateful to Ambassador Strobe Talbott, President of the Brookings Institution, for a telephone interview in October 2008. While in the nation's capital, I greatly benefited from interviews with Bruce Riedel (Brookings Institution) David Albright (Institute for Science and International Security), George Perkovich and Sharon Squassoni (Carnegie Endowment for International Peace), Alex Stolar (State Department), Leonard Spector (Monterey Institute of International Studies), Walter Andersen (School of Advanced International Studies, Johns Hopkins University), Michael Krepon and Amit Pandya (Stimson Center) Daniel Markey and Charles Ferguson (Council on Foreign Relations), William Milam (Woodrow Wilson International Center for Scholars), Daryl Kimball (Arms Control Association), and Rodney Jones (Policy Architects International). My colleague and friend, Marvin Weinbaum, provided very useful insights on the intricacies of South Asian security issues and the war in Afghanistan. I am indebted to Paul Kerr (Congressional Research Service) for updated information on the status of the Indian and Pakistani nuclear weapons programs. I am also especially grateful to Ambassador Teresita Schaffer for inviting me to attend the seminar 'India and the United States: Designing a New Partnership', on October 1, 2008, at the Thomas Jefferson Building in the Library of Congress.

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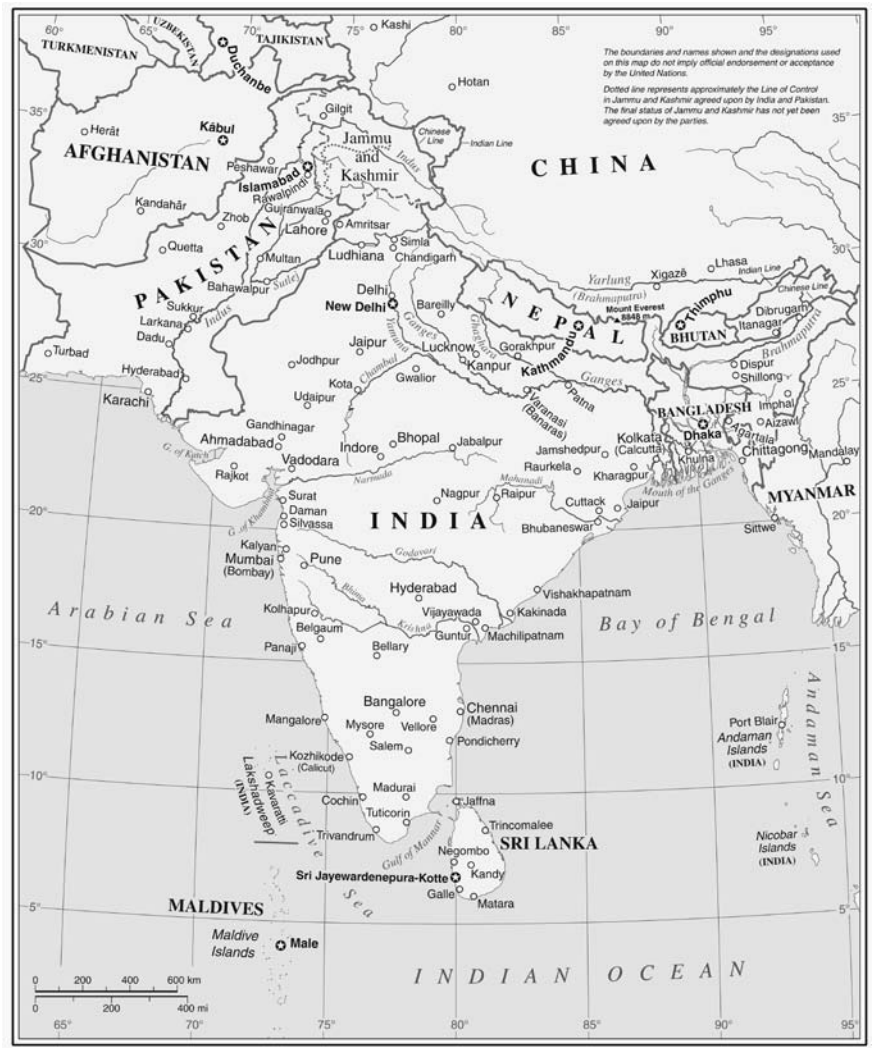
Mario E. Carranza
Kingsville, Texas, March 2009

List of Abbreviations

BWC	Biological and Toxin Weapons Convention
BJP	Bharatiya Janata Party
CBMs	Confidence-Building Measures
CD	Conference of the Committee on Disarmament (held in Geneva)
CTBT	Comprehensive Test Ban Treaty
CWC	Chemical Weapons Convention
DND	Draft Nuclear Doctrine (India)
ENDC	Eighteen-Nation Disarmament Committee
FMCT	Fissile Materials Cutoff Treaty
GNEP	Global Nuclear Energy Partnership
IAEA	International Atomic Energy Agency
IDSA	Institute of Defense Studies and Analyses (New Delhi)
INO	International Nuclear Order
IRBM	Intermediate-Range Ballistic Missile
ISI	Inter-Services Intelligence Directorate (Pakistan)
ISR	Intelligence, Surveillance, and Reconnaissance
LOC	Line of Control in Kashmir
MAD	Mutual Assured Destruction
MND	Minimum Nuclear Deterrence
MoU	Memorandum of Understanding
NAC	New Agenda Coalition
NAM	Non-Aligned Movement
NATO	North Atlantic Treaty Organization
NGOs	Non-Governmental Organizations
NMD	National Missile Defense
NNWS	Non-Nuclear Weapon States
NPR	Nuclear Posture Review
NPT	Nuclear Non-Proliferation Treaty
NRRMs	Nuclear Risk Reduction Measures
NSAB	National Security Advisory Board (India)
NSG	Nuclear Suppliers Group
NSSP	Next Steps in Strategic Partnership
NWC	Nuclear Weapons Convention
NWD	Non-Weaponized Deterrence
NWS	Nuclear Weapon States
PRP	Personal Reliability Program
PSI	Proliferation Security Initiative
SAARC	South Asian Association for Regional Cooperation

SLBMs	Submarine-launched Ballistic Missiles
START	Strategic Arms Reductions Treaty
UN	United Nations
WMD	Weapons of Mass Destruction



South Asia

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Chapter 1
Introduction: Indo-Pakistani Nuclear Relations and the Crisis of the International Nuclear Order

There are a number of studies of Indo-Pakistani nuclear relations before and after the May 1998 nuclear tests (see e.g., Sundarji 1993; Moshaver 1991; Thomas and Gupta 2000; Cohen, 2001; SarDesai and Thomas 2002). On the other hand, there are a number of studies of the enormous international ordering problem created by the first use of nuclear weapons in Hiroshima and Nagasaki in August 1945 and its impact on international politics (see, e.g, Walker 2000; 2004; 2007a and 2007b). However, there is a dearth of research on the linkages and interactions between the international nuclear order and Indo-Pakistani nuclear relations.

The international nuclear order established in the 1960s resulted from a compromise between the nuclear weapon states (NWS) and the non-nuclear weapon states (NNWS) and is embodied in the Nuclear Non-proliferation Treaty (NPT), signed in 1968 and entered into force in 1970. This order was based on a managed system of deterrence and a managed system of abstinence (Walker 2000, 703), and was rejected from the start by India, accusing the NPT of establishing 'nuclear apartheid' due to its discriminatory nature (the distinction between nuclear-haves and nuclear have-nots, with different rights and obligations). For many years India was a critic of the unjust international nuclear order embodied in the NPT, challenging it from the outside, notably by testing a 'peaceful nuclear device' in 1974 and then pursuing a policy of 'keeping the nuclear weapon option open' for twenty-four years, until it went openly nuclear with the May 1998 nuclear tests. In the 1950s, India had pioneered a Comprehensive Test Ban Treaty (CTBT) at the United Nations General Assembly and it was a major advocate of global nuclear disarmament at the Eighteen-Nation Disarmament Committee (ENDC) in the 1960s. As Perkovich (1999, 449) notes, Indian leaders, 'at least up to 1998, acted ambivalently and ambiguously. They sought the power and prestige associated with nuclear weapon capability, while insisting that India preferred nuclear disarmament and would not build nuclear weapons'. However, the decision not to join the Comprehensive Test Ban Treaty (CTBT), signed in September 1996, was a major about-face in Indian nuclear diplomacy, and since May 1998 the Indian ruling class has conveyed the opposite message: 'We *do* want nuclear weapons, because we are a great power and we need them to protect ourselves from the Chinese and Pakistani threats'. As Thakur (2006, 15) notes, 'In conducting 11 nuclear tests in 1998, India and Pakistan did not violate any

treaty they had signed. But they did breach the global anti-nuclear norm and were roundly criticized for doing so'.

The Indian and Pakistani nuclear tests of May 1998 marked the end of the post-Cold War marginalization of nuclear weapons, whose crowning event was the indefinite extension of the Non-Proliferation Treaty (NPT) in April–May 1995. Many analysts believed that after the indefinite extension of the NPT it would be possible to move progressively with 'incremental and practical steps', toward global nuclear disarmament (see Simpson 1995, 251). However, as Walker (2000, 712) notes, 'It was a false dawn. Instead of nuclear weapons losing value, they gained value, and dramatically so in some contexts'. The Indian and Pakistani nuclear tests did not deal a fatal blow to the international nuclear order, but they seriously damaged it, because 'they undermined the principle of universality that had been emphasized at the NPT Extension Conference, obstructed the entry into force of the CTBT and the negotiation of the Fissile Material Cutoff Treaty (FMCT) and damaged the NPT's prestige in the eyes of other leading states that had foresworn nuclear weapons' (Walker 2004, 48). By testing nuclear weapons, India and Pakistan were declaring nuclear weapon status at a time in which—at least rhetorically—both the NWS and the NNWS were making a serious effort to marginalize nuclear weapons from international politics. In responding to the Indian tests, President Clinton pointed out that it was wrong for India to go nuclear 'when everybody else is trying to leave the nuclear age behind' (quoted in Schell 2007, 79). The about-face in India's nuclear diplomacy became dramatically apparent in July 2005, when in announcing the beginning of the negotiations for the US-India nuclear deal, India's Prime Minister, Manmohan Singh said that by signing the agreement India would now join a 'new nuclear world order' (quoted in Schell 2007, 78). India, a long-standing critic of a US-sponsored unjust international nuclear order (epitomized by the NPT) was now seeking to join an even more unjust post-NPT nuclear order while seeking a de facto admission to the nuclear club. One of the purposes of this book is to examine the about-face in US nonproliferation policy toward South Asia from the Clinton administration (1993–2001) to the Bush administration (2001–2009) and the crisis of the NPT-centered international nuclear order that was exacerbated by the Indian and Pakistani nuclear tests and their 'unofficial' entrance to the nuclear club.

The International Nuclear Order during the Cold War

According to Walker (2000, 706; 2007a, 435) after the Cuban missile crisis of 1962 the US and the Soviet Union realized that 'they had to accommodate one another and engage in meaningful arms control, and that they possessed a common interest in the development of a non-proliferation regime.' As a result, the Cold War INO was based on two interrelated systems of cooperation:

> 1. a managed system of deterrence, whereby a recognized set of states would continue using nuclear weapons to prevent war and maintain stability, but in a manner that was increasingly controlled and rule-bound;
>
> 2. a managed system of abstinence, whereby other states would give up their sovereign rights to develop, hold and use such weapons in return for economic, security and other benefits (Walker 2000, 706).

Since the May 1998 nuclear tests, India and Pakistan are attempting to replicate the first system, but in an anarchic manner with periodic nuclear crises, without making progress in establishing a strong regional nuclear arms control regime. On the contrary, they are embarked on a nuclear arms race (cf. Joshi 2007) with no end in sight, in a regional and international security environment completely different from the Cold War: the Soviet Union is gone; Russia is no longer an ally of India; India is becoming an ally of the United States and the US-led 'war on terror' permeates Indo-Pakistani nuclear relations, redefining the Kashmir issue, the major bone of contention between the two countries. Walker (2007b, 755) has argued that 'India may (only may) become a constructive force [in a transformed international nuclear order] if a mutually satisfying *rapprochement* with the United States and with the non-proliferation regime can be negotiated.' Yet this is a big 'if', considering that (a) the US-India nuclear deal seems to foretell the emergence of a new (more discriminatory) INO, with India and Pakistan as new members of the nuclear club; and (b) there is no Indian rapprochement with the NPT regime and (barring dramatic internal political changes) India is unlikely to join the NPT as a non-nuclear weapon state.

From Non-Weaponized Deterrence to an Indo-Pakistani Nuclear Arms Race

In the early 1990s some scholars (e.g., Perkovich, 1994, see Table 1) argued that a 'non-weaponized deterrence' (NWD) regime in South Asia might not only prevent a nuclear build-up in the region but offer a model for the eventual elimination of the nuclear arsenals of the full-fledged nuclear powers. The prospects for a positive synergistic link between an NWD regime in South Asia and global nuclear disarmament were shattered not only by the May 1998 nuclear tests, but also by the Bush administration's policy of re-legitimizing nuclear weapons in the Nuclear Posture Review of December 2001 while abandoning and even denigrating traditional nuclear arms control accords. Can the positive synergistic link between South Asia's 'virtual nuclear arsenals' and the INO be reestablished in the post-Bush era?[1]

Unfortunately, Perkovich's 'non-weaponized deterrence' regime never came into existence. Instead, India and Pakistan declared nuclear weapon status in May

1 On virtual nuclear arsenals, see Mazarr 1997.

Table 1 Indo-Pakistani Nuclear Relations and the International Nuclear Order (INO) Since the End of the Cold War

Before the May 1998 Nuclear Tests	Between the May 1998 Nuclear tests and 9/11/2001	After September 11, 2001
1. Positive synergistic link: Non-weaponized Deterrence (NWD) is seen by some scholars (e.g., Perkovich 1994) as a model of arms control for the Nuclear Weapon States (NWS) (Virtual arsenals) 2. India and Pakistan can still be drawn into a still possible 'non-weaponized' nuclear order (see Perkovich (1994, 121–23)	1. Negative synergistic link: nuclear tests reinforce other sources of nuclear disorder (Walker 1998, 506) a. Nuclear tests challenge the norm against proliferation b. Fears of nuclear war in South Asia (Kargil, 1999) c. Nuclear tests challenge assumption that a permanent + universal shrinkage of nuclear arms is underway d. India and Pakistan can no longer be drawn into the INO without violating the Non-Proliferation Treaty (NPT)	1. Negative synergistic link: South Asia's nuclearization reinforces the deterioration of the INO, exacerbated by the Bush administration's disdain of traditional nuclear arms control and the de facto recognition of India and Pakistan as NWS 2. Indo-Pakistani nuclear relations remain zero-sum 3. Stable deterrence is still fragile and precarious (Twin-Peaks crisis, 2002) 4. Danger of nuclear terrorism makes deterrence even more precarious 5. Domestic politics has greater spillover effects on Indo-Pakistani nuclear relations and the Kashmir dispute

1998 and fought a limited conventional war in Kargil in May–June 1999. After Kargil, there was a greater danger of nuclear use in the subcontinent. The new Indian position that nuclear deterrence does not prevent 'limited wars' created a very dangerous situation, considering Pakistan's doctrine of nuclear first use and Indo-Pakistani nuclear and missile races that would inevitably raise the stakes in a future Kargil-like conflict. Stable nuclear deterrence had become very difficult to achieve, given the short distances involved, command and control problems, and the dangers of misperception, aggravated by the absence of adequate early warning systems.

The Kargil war (May–July 1999) buried the hopes for rapid progress toward a nuclear settlement. India refused to sit down with Pakistan at the negotiating table, accusing its neighbor of supporting 'cross-border terrorism' in the disputed territory of Kashmir. Bilateral negotiations were interrupted for more than two years—until May 2001—when India's Prime Minister Vajpayee decided to

invite General Musharraf, Pakistan's military ruler, for talks in the Indian city of Agra, which took place on 16–17 July 2001. The Agra summit failed to make any substantive progress on the Kashmir dispute, or on reducing the risks of a nuclear exchange. The 13 December 2001 terrorist attack on the Indian parliament prompted the Twin Peaks crisis of 2002, when India and Pakistan faced each other on the brink of an all-out war for more than six months, with 1,000,000 troops on each side of the common border. In late 2003 and early 2004 the two countries managed to revive a 'composite dialogue' but as Croft (2005, 1057) notes, 'There have been few real signs of progress, even among the potentially easy wins'. Despite some confidence-building measures (CBMs) and Nuclear Risk Reduction Measures (NRRMs) the nuclear danger has not been eliminated from South Asia. Moreover, the US-India nuclear deal—if implemented—will exacerbate the Indo-Pakistani nuclear and missile race.

The State of the Literature on Indo-Pakistani Nuclear Relations and the International Nuclear Order

Much of the literature on regional security in South Asia after the May 1998 nuclear tests starts from the premise that the nuclearization of the subcontinent is irreversible and that the only realistic research program is to find ways to maximizing 'stability' in a nuclear South Asia. The conventional wisdom is that minimum nuclear deterrence will keep the peace in the region. For example, Basrur (2006) argues that minimum nuclear deterrence is the best policy option for India, but he does not consider the arguments against this option (see e.g., Rehbein 2002, 94; Lavoy 2003). The Basrur book is an example of a dangerously optimistic approach to South Asian security that will be thoroughly examined in Chapter 2. Other scholars (e.g., Krepon 2004) only focus on confidence building (CBMs) and nuclear risk reduction measures (NRRMs) which are important but may not prevent nuclear use in a future crisis, considering the poor historical record of CBMs.

I will argue that stable nuclear deterrence in the subcontinent is an impossible game, and that the best way of avoiding a nuclear catastrophe is to establish a nuclear arms control regime as a first step to denuclearize South Asia. India and Pakistan have already had two nuclear crises since they decided to 'go nuclear' in May 1998. A third crisis could well result in an all-out conventional war that escalates to the nuclear level if the US government fails to intervene in time to defuse the crisis. Political instability in Pakistan and the fact that a major scenario of the war on terror is in the neighborhood (the tribal areas in Pakistan's Northwest Frontier Province) adds an element of unpredictability to Indo-Pakistani strategic interactions, aggravated by the Islamic terrorist threat. There is an increasing awareness in the scholarly literature of the need to take nuclear abolition seriously in order to face up to the danger of nuclear terrorism. As Johnson (2006b, 63) notes:

> During the 1990s, nuclear weapons became viewed increasingly as a security problem, even by the weapons states. Though it is debatable whether policy makers in the nuclear-weapon states (NWS) were ever convinced that eliminating their own nuclear weapons would contribute to their security, the concepts of disarmament and the non-use of nuclear weapons had become integral normative components of non-proliferation.

After the 9/11 terrorist attacks against the United States, the danger of catastrophic nuclear terrorism has created an urgent need to make progress toward a Fissile Material Cutoff Treaty (FMCT) as one of several steps toward nuclear abolition. As Tannenwald (2007, 381) points out, 'The one group for whom the [nuclear] taboo may hold little meaning is terrorists'. Hence the need to strengthen the international nuclear order based on the NPT to prevent terrorist organizations from gaining access to weapons-grade fissile material. This danger is particularly acute in Pakistan, where Al Qaeda has a foothold, but also in India, with its large nuclear weapon complex (power reactors, plutonium reprocessing plants) that keep on producing weapons-grade fissile materials free from non-proliferation controls thus becoming an attractive target for terrorist groups.

Those who argue that nuclear deterrence is at work and prevents a conventional war in South Asia invoke Glenn Snyder's 'stability-instability paradox' (see Snyder 1965, quoted in Ganguly and Hagerty 2005, 18) but they overlook the limits of US diplomacy to prevent nuclear war in a crisis and the fact that Islamic insurgents could trigger a nuclear confrontation in a crisis, especially if political instability in Pakistan continues, even in the absence of a political breakdown leading to the establishment of an Islamic regime. Only a meaningful transition to democracy in Pakistan could prevent this scenario, but despite the emergence of a weak democratic regime in February 2008 the Pakistani military is still a powerful domestic political force and the 'war on terror' has prevented the United States from unequivocally committing itself to the establishment of a strong democratic regime in Pakistan.

The post-9/11 regional and global security environments, with the threat of nuclear terrorism show the urgency of ridding the subcontinent of nuclear weapons. The conventional wisdom is that it is unrealistic—and naïve—to bring the issue of South Asia's denuclearization back in to the academic and policy-making agenda. As Thakur (2006, 9) puts it, 'For India, Israel and Pakistan, the question is no longer if they are nuclear powers but what kind of nuclear powers they are going to be'. However, the US foreign policy establishment has begun to consider progress toward global nuclear disarmament as a global security imperative in the age of catastrophic terrorism. In January 2007 George Shultz, William Perry, Henry Kissinger and Sam Nunn published a ground breaking article in the *Wall Street Journal* arguing that the United States should take the lead in showing the way to a world free of nuclear weapons (see Shultz et al. 2007, 2008). The crisis of the NPT-centered international nuclear order and the uncertainties surrounding the emergence of a new International Nuclear Order (INO) after six decades of 'learning

to live with the bomb' may force India, Pakistan, and Israel to reconsider—under pressure from the United States and the rest of the international community—their dismissive attitude toward nuclear arms control and disarmament.

As Rebecca Johnson notes, the realist argument to abolish nuclear weapons is that the world has changed. No one could possibly accuse Kissinger et al. of being 'soft on defence'. 'Even if they once thought nuclear weapons to be useful, they now recognize them to be a problem and not an asset, more likely to provoke proliferation and use by others than to deter' (Johnson 2006a, 1–2). Yet at a time in which a growing number of nuclear experts—led by prominent former American nuclear 'hawks'—are calling for a 'solid consensus' to reverse reliance on nuclear weapons globally, India and Pakistan have embarked on a nuclear weapons build-up (see Joshi 2007) hoping that nuclear deterrence will keep the peace in the Indian subcontinent.

The Crisis of the NPT and the Emergence of a New International Nuclear Order

Several analysts have noted that the NPT regime is in crisis, as shown by the inability of the May 2005 NPT Review Conference to agree on a common agenda and produce a final document with concrete steps for preventing the spread of nuclear weapons. There is a real possibility that the 2010 NPT Review Conference could also end in failure (du Preez 2008). Arguably, the indefinite retention of nuclear weapons by the five declared nuclear weapon states, despite article VI of the NPT and their continuing reliance on the doctrine of deterrence undermine the core bargain of the NPT and threaten the treaty's survival. On the other hand, as Rebecca Johnson notes, 'The war on Iraq, the adoption of the Proliferation Security Initiative (PSI), and the decisions at recent meetings of G-8 heads of state and NATO reflect and promote the reframing of non-proliferation as a policing operation rather than a regime-building process' (Johnson 2006b, 75). The NPT is in danger of becoming irrelevant, as a new International Nuclear Order (INO) begins to take shape. This new INO is being increasingly used by the United States as an instrument of its 'war on terror'. As Rebecca Johnson also notes, 'Even New Delhi, erstwhile champion of non-aligned pressure for nuclear disarmament, will happily go along with narrow non-proliferation provided that India is accepted as a member of the nuclear club, as is increasingly the case (though not in terms of the NPT)' (Johnson 2006b, 76). Arguably, India's unofficial entrance to the 'nuclear club' severely undermines the NPT regime. As a new member of the 'nuclear club' India is part of the newly emerging international nuclear order (INO) but it could change course in the direction of a third scenario: a new, truly disarmament oriented INO, aiming at the final elimination of nuclear weapons, 'as the international community did with its effort to ban chemical weapons' (see Subrahmanyam 2008). This alternative INO—that would lead to the denuclearization of South Asia—could be based on former Indian Prime Minister

Rajiv Gandhi's 'Action Plan for a World Free of Nuclear Weapons', presented at the Third Special Session on Disarmament of the UN General Assembly in September 1988. Russia and the United States can implement several items in the global nuclear arms control agenda—including the establishment of a meaningful strategic arms control regime after the START I treaty expires in December 2009—without Indian and Pakistani participation.[2] However, real progress toward global nuclear disarmament is very difficult without Indian and Pakistani cooperation. A Fissile Material Cutoff Treaty (FMCT) and the Comprehensive Test Ban Treaty (CTBT) will not work without Indian, Pakistani, and Israeli cooperation. On the other hand, most nonproliferation and South Asia experts recognize that India will not take steps to achieve South Asian denuclearization without parallel progress in global nuclear disarmament (see e.g., Perkovich 1999, 464). Before the May 1998 nuclear tests, India had strong incentives to sign a fissile material cutoff agreement, that would legitimize its nuclear weapons program by exempting from IAEA safeguards already produced stockpiles of fissile material, thus implicitly recognizing it as a de facto nuclear weapon state; and somewhat undermining the NPT regime that only considers two classes of states: declared nuclear weapon states which tested nuclear weapons prior to 1967 and non-nuclear weapon states which are committed not to produce or acquire nuclear weapons and to accept 'full-scope' IAEA safeguards on all their nuclear facilities. Still, most nonproliferation experts believed that the NPT 'would be strengthened by a cutoff agreement which engaged non-parties into accepting limits on their nuclear programs and which introduced new transparency' (Berkhout et al. 1994/95, 198). After the May 1998 nuclear tests India has fewer incentives to sign an FMCT considering the open-ended nature of its search for a 'credible minimum nuclear deterrent', and it rapprochement with the United States. The US-India nuclear deal of 2008 legitimizes India's status as a de facto nuclear weapon state without an Indian commitment to freeze the production of fissile materials for nuclear weapons (see Chapter 5). Moreover, the US-India nuclear deal frees up India's domestic uranium for its nuclear weapons programme. Even if the Singh administration practices nuclear restraint, a future Indian government could take advantage of the nuclear deal with the United States to use more domestic uranium (now available thanks to the supply of foreign nuclear fuel) to increase its stockpile of weapons-grade fissile material available for nuclear weapons.

In a sense, the NPT-centered INO has always been in crisis, but before the 9/11 terrorist attacks it managed to survive as the only 'game in town'. As Potter and Mukhatzhanova note, 'Questions about the NPT's survivability were raised as early as in the 1970s, both before and after the first NPT review conference' (Potter and Mukhatzhanova 2008, 156; see also Epstein 1976, 244–258). The current crisis has been provoked by the abandonment by the George W. Bush administration of the

2 I am indebted to Daryl Kimball Executive Director of the Arms Control Association, for bringing this important point to my attention. Interview with Daryl Kimball, Washington, DC, 30 September 2008.

Clinton administration's treaty-based multilateral approach to non-proliferation, in favor of a policy that (a) views nuclear weapons as a counterproliferation tool, and (b) 'uses the "war on terror" to shift international support from regime-based non-proliferation to counter-proliferation under the auspices of willing cartels or coalitions of the self-proclaimed "good guys"' (Johnson 2006b, 76).

As K. Subrahmanyam notes, 'the basic premise of the Nuclear Non-Proliferation Treaty (NPT) was enshrined in article VI of the treaty, which stated that the possession of nuclear weapons should only be temporary and that the international goal ultimately was to eliminate them' (Subrahmanyam 2008, 9). Although some scholars downplay the centrality of article VI in the NPT bargain (see e.g., Krause 2007, 486–92) the dominant interpretation is that article VI *is* a fundamental element of the NPT bargain (see e.g., Walker 2007a, 439; Graham 2008). As Epstein (1976, 94) points out, 'The non-nuclear states insisted that if they were to forego nuclear weapons, the nuclear powers must stop the nuclear arms race and begin to disarm'.

A Tale of Three INOs

The history of the international nuclear order (INO) since the invention of the atomic bomb is a tale of three INOs: (1) the present status quo, that has become increasingly shaky not only because of the North Korean and Iranian 'test cases' but also because the five declared nuclear weapon states have disavowed the 'Thirteen Practical Steps' agreed upon at the 2000 NPT Review Conference, (2) a new, disarmament oriented NPT, that would reconnect nuclear disarmament with non-proliferation, or (3) an emerging new International Nuclear Order, even more unequal and discriminatory than the NPT; based on the United States-India nuclear deal; a post-proliferation INO based on the distinction between 'good' and 'bad' proliferators. Ironically, Indian strategic analysts such as K. Subrahmanyam (2008, 9) condemn the indefinite extension of the NPT in 1995 for legitimizing 'the perpetual possession of nuclear weapons in the hands of five nuclear-weapon states',[3] while supporting an Indian nuclear weapons build-up with no end in sight, despite all the talk about building only a credible 'minimum nuclear deterrent'. India is still a member of the Non-Aligned Movement (NAM) that has long supported a time-bound framework for nuclear disarmament.

Some scholars argue—within the context of the US-India rapprochement and the US-India nuclear deal—that in the post-9/11 international environment India's foreign policy and nuclear diplomacy 'will continue to be based on a hedging strategy—and any overt, ideological commitment to a particular world order would reduce flexibility' (Mehta 2008, 211). However, India was strongly

3 Subrahmanyam (2008, 9) also argues that 'it cannot be legal for some countries to possess a category of weapons while it is illegal for others to do so. A regime that is based on such inequality cannot be expected to be stable or secure against further proliferation'.

committed to a world order *without* nuclear weapons under Prime Minister Nehru (1947–1964). In most of his public speeches, Nehru adopted a strong anti-nuclear weapons posture; he tirelessly repeated that nuclear weapons are 'frightful engines of destruction', that India would use atomic energy 'for peaceful purposes only', and that the central goal of India's foreign policy was 'to wean nations away from the path of the nuclear suicide'. This view was echoed by Indian Prime Minister Indira Gandhi when she told Rodney Jones: 'No…we don't want nuclear weapons. They only bring danger where there was none before' (quoted in Perkovich 1999, 178). The conventional wisdom is that India only 'went nuclear' in 1998, after coming to the conclusion that the nuclear weapon states would 'never' give up their nuclear arsenals. Some advocates of India's nuclear arsenal justify the decision to go nuclear in May 1998 as a response to the negotiation of an 'unfair' CTBT in September 1996. However, it is now well-documented that Indian Prime Minister Rajiv Gandhi gave the green light to the production of a secret Indian nuclear arsenal (a 'bomb in the basement') in 1988 (ten years before the nuclear tests of May 1998!) even as he presented to the UN General Assembly Special Session on Disarmament, in May 1988, a bold 'Action Plan' for a three-stage track to eliminate nuclear weapons globally by 2010.

How does one explain such a blatant gap between deeds and words? Perkovich explains it in terms of Rajiv Gandhi's 'personal traits': his fascination with technology, which empowered the pro-bomb 'strategic enclave', and his eagerness to 'see international relations transformed and nuclear weapons abolished' (Perkovich 1999, 292). An alternative explanation is that 'the debate over nuclear weapons in South Asia is something much broader than merely a question of strategy, technology, or power. It is, in essence, a question of culture' (Zook 2000, 39). If this 'constructivist' interpretation is correct, it is important to look at the history of India's and Pakistan's nuclear weapons programs, as a first step to deconstruct the national mythologies justifying them; including the concept of 'nuclear apartheid' (see e.g., Jaswant Singh 1998).

As Vanaik (2005) notes, 'There can be no doubt that regional disarmament is greatly facilitated by progress in respect of global nuclear disarmament and that the latter must mean above all, changing the behavior of the United States'. Yet this is a very convenient way for India and Pakistan to avoid responsibility: blaming the United States for a nuclear predicament of their own making. It is true that India and Pakistan's motivations to acquire nuclear weapons are mainly driven by regional security circumstances: the 'Indian threat' is Pakistan's paramount security concern. For India, the primary motivations since losing the 1962 Sino-India war is the conventional and nuclear military threat posed by China and the nuclear threat posed by Pakistan since the early 1980s. However, US policies and decisions can change the dynamics of a regional conflict and of regional proliferation. If the United States ratifies the Comprehensive Test Ban Treaty (CTBT), accepts a verifiable Fissile Material Cut-off Treaty (FMCT) and/or begins negotiations for a Nuclear Weapons Convention India would be forced to make good on its rhetorical commitment to global nuclear disarmament.

Both India and Pakistan would be better off without nuclear weapons. Nuclear weapons have often been depicted as the 'great equalizer' in international relations and Pakistan's refusal to a no-first use policy has often been compared to NATO's nuclear first use policy in the European theater during the Cold War. From this perspective, the nuclear tests of May 1998 favored Pakistan, because India lost the advantage of more or less permanent conventional military superiority. However, as Vanaik (2002, 7) notes, from the Pakistani perspective, 'since India is its principal security problem, mutual denuclearization is acceptable and preferable to the continuation of nuclear rivalry, with its disproportionate burden on Pakistan's economy and polity'. From India's perspective, a Pakistani commitment to no-first use would be 'a transitional measure while both countries move towards regional denuclearization within a stipulated time frame' (Vanaik 2002, 7).

The idea that nuclear weapons do not necessarily enhance a country's security came under greater scrutiny in the immediate post-Cold War era in the early 1990s (see e.g., Reiss 1995). However, after the September 11, 2001 terrorist attacks against the United States, the Bush administration's Nuclear Posture Review—announced in December 2001—called for 'greater flexibility' in nuclear forces and planning in order to maintain a 'credible deterrent' against new adversaries and re-legitimized nuclear weapons as weapons of war as official US nuclear doctrine. Even though the Bush administration did not openly challenge the legitimacy of the norm against proliferation embodied in the NPT the policy change represented by the Nuclear Posture Review indirectly gave a certain veil of legitimacy to the Indian and Pakistani nuclear weapons programs. During the Bush administration, nuclear weapons reclaimed and regained legitimacy as a currency of power in international affairs. The distinction between 'good' and 'bad' proliferators legitimized nuclear proliferation in South Asia by placing India and Pakistan on the 'good' side of the ledger; even if the domestic political situation in Pakistan raised serious concerns about the safety of the Pakistani nuclear arsenal. In the case of India, the Bush administration not only stopped harassing it about its nuclear weapons program; it implicitly encouraged India to build its nuclear arsenal in earnest, as part of the US goal to help India to become a global great power.

The incipient post-9/11 international nuclear order is based on a number of fragmentary ad hoc efforts such as the Proliferation Security Initiative (PSI) and UN Security Council Resolution 1540. Some of these efforts, such as the 1997 Model Additional Protocol which strengthens IAEA safeguards are valuable. Yet, as Dhanapala notes, 'they cannot separately or together, stem the tide of proliferation that arises from the political and military value attached to nuclear weapons [by the five declared nuclear weapon states and the three NPT holdouts]' (Dhanapala 2008, 15). The challenge for the non-proliferation regime is how to convince the Indian political elite that a return to the Nehruvian anti-nuclear tradition is in India's best interest and would not detract from its aspirations to great power status.

The nuclear hawks in India argue that nuclear disarmament in South Asia is both infeasible and undesirable. They repeat the often quoted 'politics first'

approach according to which nuclear disarmament in South Asia is unattainable until India and Pakistan arrive at a final settlement of the Kashmir dispute. On the other hand, nuclear pragmatists argue that 'nuclear weapons are no more than a necessary evil' (Basrur 2006, 182) hence the need for a minimum deterrence doctrine and posture.

Yet those who argue that nuclear deterrence is better than nuclear disarmament to keep the peace in South Asia ignore the real dangers of the present situation in the Indian subcontinent. S. Paul Kapur (2007) has shown that contrary to what proliferation optimists would make us believe, 'nuclear danger does not necessarily discourage conventional violence' (Kapur 2007, 175). Moreover, 'nuclear weapons can contribute to the outbreak, rather than just to the escalation, of confrontation between nuclear powers' (Kapur 2007, 176). The empirical evidence provided in S. Paul Kapur's book confirms my hypothesis that after the May 1998 nuclear tests achieving stable nuclear deterrence in South Asia is an 'impossible game'. Proliferation optimists have long invoked the stability/instability paradox to demonstrate the feasibility and desirability of nuclear deterrence in South Asia. From this perspective, the existence of nuclear weapons would 'create a protective umbrella under which states could pursue their political conflicts at levels of violence below the conventional and nuclear thresholds' (Ganguly and Hagerty 2005, 18). However, as Kapur (2007, 175) shows, such 'paradox' 'does not explain Indo-Pakistani military behavior in a nuclear South Asia', where 'Pakistani aggression has relied not upon a high level of strategic stability, as per stability/instability logic, but rather upon the existence of a considerable measure of *instability* in the Indo-Pakistani strategic balance' (Kapur 2007, 173). He conclusively shows that 'the phenomenon at work in South Asia would better be characterized as an 'instability/instability paradox', under which instability in the strategic realm encourages instability at lower levels of conflict' (Kapur 2007, 173). Hence 'no strategic environment in South Asia is without conventional danger'. Kapur also shows that 'the Indians' confidence that they can fight a conventional war with Pakistan against a nuclear backdrop has been growing and resulting in increasingly forceful Indian responses to Pakistani adventurism' (Kapur 2007, 180). General V.P. Malik has even argued (before the Twin-Peaks crisis of 2002) that escalation from the conventional to the nuclear level in a future Indo-Pakistani war can be 'carefully climbed in a carefully controlled ascent by both protagonists' (quoted in Kapur 2007, 180).

Most analysts believe that regional denuclearization in South Asia is at best a distant goal. The idea that the denuclearization of South Asia is 'out of the question' has become entrenched in the official discourse and in the academic community; especially in the influential group of South Asia experts in the United States (less among non-proliferation experts). Yet the strong disagreement among scholars on the stability of nuclear deterrence in South Asia after the May 1998 nuclear tests raises troubling questions on the sustainability of a nuclear-armed peace in the region. If as Kapur (2008, 91) argues, India's Cold Start military doctrine—developed after the 2001–2002 military standoff—'may erode the firebreak between

conventional and nuclear conflict in the subcontinent', the international community and millions of people in South Asia cannot wait until the next Indo-Pakistani crisis to take meaningful political and diplomatic steps toward the denuclearization of the region. The challenge of denuclearizing India and Pakistan is similar to the challenge of denuclearizing the five declared nuclear weapon states: establishing a strong nuclear arms control regime leading to nuclear disarmament; with the important difference that unlike the 'big five' India and Pakistan are not bound by article VI of the NPT that links nuclear disarmament with unproliferation and non-proliferation. On the other hand, the South Asian rivals cannot isolate themselves from changing international developments including changing international perceptions on the desirability of continuing to rely on nuclear deterrence to maintain international peace and security. After 9/11, the nuclear predicament has become an urgent global issue, beyond national and regional borders.

Conclusion

Nuclear abolition is back on the agenda of Washington DC think tanks. The Shultz et al. *Wall Street Journal* articles (2007, 2008) and subsequent reports from a task force based at Stanford University carry enormous political weight in Washington's policymaking and strategic studies community because they come from the former architects and executors of the doctrine of nuclear deterrence during the Cold War. They also matter for two additional reasons. First, because they go beyond the numbers game of Cold War arms control. As Rebecca Johnson (2006a, 2) notes, 'The practical steps they advocate are more explicit and US-oriented, but they build on the "Thirteen Practical Steps" agreed by NPT States Parties in 2000, and recognize the need to devalue and marginalize nuclear weapons in security and defense policies'. Second, Shultz et al. argued that marginalizing and eventually abolishing the bomb was a critical component of a strategy to effectively reduce the post-9/11 threats of nuclear proliferation and terrorism. Yet some scholars argue that even if the 'Big Five' implement the 'Thirteen Practical Steps' of the 2000 NPT Review Conference (including an 'unequivocal commitment' to take steps to eliminate nuclear weapons) India and Pakistan will not necessarily refrain from developing their nuclear arsenals. Still one may argue that the fate of the International Nuclear Order (INO) is inextricably linked to the fate of Indo-Pakistani nuclear relations. Until the South Asian rivals stop loving the bomb and realize that it is not in their national interest to keep it; it will be impossible to make progress toward *global* nuclear disarmament, even if the 'Big Five' take steps to get rid of their nuclear weapons. The other side of this coin, however, is that if the 'Big Five' *do* take significant steps to get rid of their nuclear weapons, India (and by extension, Pakistan) would be under enormous diplomatic pressure from the 'Big Five' to follow suit. India would no longer be able to delay rolling back its own nuclear weapons program by arguing that the 'Big Five' are only interested in perpetuating 'nuclear apartheid' (see Jaswant Singh 1998).

Even if '[nuclear] rollback does not occur by simply rewinding and erasing the process that led a state to proliferate' (Perkovich 1999, 456) it is not futile or naïve to think about under what conditions nuclear rollback in South Asia would be feasible. Pakistan has proposed nuclear rollback to India six times since May 1998 (see Vanaik 2002, 6). Pakistan's repeated proposals for regional denuclearization reflect the view, 'widespread within Pakistan, that since India is its principal security problem, mutual denuclearization is acceptable and preferable to the continuation of nuclear rivalry, with its disproportionate burden on Pakistan's economy and polity' (Vanaik 2002, 7). On the other hand, India's counterproposal is that Pakistan adopt, as New Delhi has, a no-first use policy. Such a commitment could pave the way towards a regional denuclearization agreement.

Does the US-India nuclear deal foretell the emergence of a new International Nuclear Order (INO), even more unequal than the NPT regime? Alternatively, can the NPT regime be revived and reinforced, as a first step to start global nuclear disarmament negotiations?

There are two possible scenarios. If India and Pakistan forswear the bomb, the INO-NPT regime will be revived and reinforced. However, if they continue their arms race China will follow suit and the INO-NPT regime will be slowly replaced by a new INO, perhaps similar to the proposals for NPT amendment made by former US President George W. Bush and IAEA Director General El Baradei (see Carranza 2006, 511) almost exclusively based on a deterrence-based system; without the second leg of Walker's depiction of the INO during the Cold War (nuclear abstinence, see Walker 2000, 706). Even if some states continue refraining from 'going nuclear'; the dynamics of nuclear proliferation would dramatically change and the emergence of new nuclear weapon states would always be around the corner.

Which of the two scenarios will come into existence is an open question. This book seeks to answer that question by looking at the history of Indo-Pakistani nuclear relations before and after the nuclear tests of May 1998 and in the post-9/11 era. Chapter 2 examines the concept of 'opaque' nuclear proliferation and the debate on 'non-weaponized deterrence' before the May 1998 nuclear tests. Chapter 3 explores alternative explanations for the Indian and Pakistani nuclear tests of May 1998. Chapter 4 discusses the India-Pakistan crises after the nuclear tests: the Kargil conflict of May–June 1999 and the 2001–2002 border confrontation. The next chapter examines the history of US non-proliferation policy toward South Asia: from non-proliferation to post-proliferation and the *de facto* recognition of India and Pakistan as nuclear weapon states during the George W. Bush administration. The concluding chapter summarizes the book's findings on the interaction between the Indo-Pakistani nuclear competition and the International Nuclear Order (INO). It takes stock of the Indo-Pakistani 'composite dialogue' and discusses alternative scenarios for the denuclearization of South Asia as part of a broader effort to move forward the currently stalled regional and global nuclear arms control and disarmament negotiations.

Chapter 2
Dangerous Optimism: Indo-Pakistani Nuclear Relations Before the May 1998 Nuclear Tests[1]

Introduction

Before the May 1998 nuclear tests the conventional wisdom was that nuclear proliferation in South Asia was irreversible and that the best US non-proliferation strategy was to work with India and Pakistan toward 'capping' their nuclear weapons programs (Gordon 1994; Cohen 1991, 350; Perkovich 1994, 113; Reiss 1993, 1118; Asia Society Study Group 1995, 37; Ganguly 1996) rather than rolling them back and eventually eliminating them. This chapter challenges the conventional wisdom, showing that 'non-weaponized' or 'existential' deterrence did not guarantee a 'nuclear peace' in the subcontinent. I will argue that the present nuclear dangers in South Asia—including the possibility that India will escalate a future Indo-Pakistani crisis to an all-out conventional war that could become a nuclear confrontation, see Kapur 2008, 87–94—did not come out of the blue. On the contrary, the current unstable balance of terror between India and Pakistan has been made possible by the dominance of proliferation optimism in the scholarship on Indo-Pakistani nuclear relations that led to the wrong belief that nuclear deterrence would indefinitely keep the peace in the region. The idea that nuclear dangers could be easily managed in South Asia was promoted not only by Indian security analysts complaining that the West lacked moral authority to doubt the ability of the Indian elite to exercise command and control over India's nuclear arsenal, but also by an American epistemic community that included influential Indian-American scholars who made the case for allowing India to have its 'minimum nuclear deterrent', also using proliferation optimistic arguments (see e.g., Tellis 2001, 2003). This epistemic community had an impact on the change in US non-proliferation policy toward South Asia, from the 'capping strategy' during the first Clinton administration to the quiet acceptance of a nuclear India and a nuclear Pakistan during the George W. Bush administration (2001–2009); thus completely abandoning the early 1990s' policy of rolling back India's and Pakistan's nuclear weapons programs (see Chapter 5).

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1 Portions of this chapter are drawn from Mario E. Carranza, 'Dangerous Optimism: Non-weaponized Deterrence and Regional Peace in South Asia', *International Politics*, Vol. 35, No. 2 (June 1998), pp. 107–134. Reproduced with permission of Palgrave Macmillan.

The roots of South Asia's 'dangerous deterrent' (Kapur 2007) can be traced back to the first half of the 1990s, when it was still possible to press India and Pakistan to adopt binding non-proliferation commitments, such as a bilateral agreement to freeze the production of weapon-grade fissile materials (the so-called 'capping strategy') as a first step to roll back both countries' nuclear weapons programs as part of a broader effort to marginalize nuclear weapons from international politics. Instead, the move toward an acceptance of the 'nuclear realities' in South Asia was based on the wrong assumption that Indo-Pakistani nuclear relations could be stabilized at the level of non-weaponized deterrence (NWD). For proliferation optimists, the mere existence of nuclear weapon capabilities in South Asia deterred India and Pakistan from conventional or nuclear war. This chapter shows that proliferation optimists were wrong, and that there was a real danger of an Indo-Pakistani nuclear confrontation even before the May 1998 nuclear tests.

The argument proceeds in several steps. First I analyze the ambiguities of the concepts of 'non-weaponized deterrence' (henceforth NWD) and 'opaque nuclear proliferation', and whether the distinction between different levels of nuclear 'opacity' helps to understand the Indo-Pakistani nuclear competition before the May 1998 nuclear tests. I show that in certain scenarios NWD can be unstable and lead to an early use of nuclear weapons in a crisis. Second, I discuss whether NWD operated during the Indo-Pakistani crises of Brasstacks (1987) and Kashmir (1990). In the next section I argue that it was still possible to denuclearize South Asia before the May 1998 nuclear tests. The conclusion examines whether a stable regional 'balance of terror' could have been established in South Asia in the pre-tests period.

The concept of 'non-weaponized deterrence' was first used by Schell (1984, 187) extending Waltz's analysis of the stabilizing impact of nuclear proliferation to a world of virtual 'nuclear porcupines': 'In our nuclear-armed world, proliferation—of capacity, not of weapons—could be stabilizing. It would multiply the reasons for holding back from aggression'.[2] Before the May 1998 nuclear tests, the concept of NWD was taken up both by US non-proliferation scholars dealing with post-Cold War nuclear disarmament issues, and by South Asian security analysts seeking a way out to the nuclear stalemate in the subcontinent (see e.g., Asia Society Study Group 1995). 'Non-weaponized' or 'existential' deterrence between India and Pakistan has been even presented as a model for the five declared nuclear weapon states and Israel (Reiss 1995, 230; Lavoy 1995, 730;

2 According to Waltz (1981, 22), 'Deterrent balances are inherently stable'. For earlier work on the stabilizing effect of nuclear weapons, see Waltz (1964); Gallois (1961); Weltman (1979). The idea that because of their overwhelming destructive capacity nuclear weapons have a stabilizing effect on international relations was first proposed by Brodie (1946, 76) and then by Winston Churchill in a famous speech to the House of Commons in 1955, after the production of the first hydrogen bomb: 'Safety will be the sturdy child of terror, and survival the twin brother of annihilation'. The concept was further elaborated by Bundy (1984). For a critique, see Schell (1982, 197–98).

Perkovich 1993, 101). In the United States, several proposals have been made to move toward Schell's 'weaponless deterrence', or a world of virtual nuclear arsenals (see Mazarr 1997). It has been suggested that instead of 'real' verifiable nuclear disarmament agreements between the United States and Russia, nuclear warheads should be taken off delivery vehicles and placed in 'strategic escrow' while START I, START II, and possibly a global ban on ballistic missiles are implemented (Frye 1996, 103).

Nuclear abolition was out of the question during the Bush administration (2001–2009). The Nuclear Posture Review of 2001 legitimized nuclear weapons as weapons of war and considered several contingencies of nuclear use against potential adversaries.[3] However, if a strategy of virtual abolition gains ground during the Obama administration, determining whether a stable balance of virtual nuclear arsenals can be established in South Asia is not only of theoretical interest but has policy implications that go beyond the subcontinent.[4]

It is worth noting that what Schell has in mind is a *global* nuclear abolition agreement. Without such an agreement, weaponless deterrence does not solve the nuclear predicament at the regional level, and may be dangerously reassuring. Booth and Wheeler (1992, 33) claim that Indo-Pakistani nuclear relations give empirical support to Schell's case: 'Each additional day there is no nuclear war between India and Pakistan is a testament to "weaponless deterrence"; each additional day there is no major war between them is a testament to the obsolescence of major war; and each additional day they remain democracies and do not fight is a testament to the peaceful propensities of democracies'. Yet the two countries not only went openly nuclear in May 1998 by testing nuclear weapons; they also fought a war with more than 1,000 battle deaths in the Kargil section of Kashmir less than a year after the nuclear tests, when Pakistan was still a fragile democracy. As we will see in Chapter 4, there was a real danger of nuclear use in this crisis. Had the Kargil war escalated to an all-out conventional war, it would have been a tragedy even without the use of nuclear weapons but, as Fetter (1996, 177) notes, 'a war with nuclear weapons that escalated to attacks on cities would have resulted in civilian casualties of a magnitude and suddenness unprecedented in human history'.

Was nuclear deterrence at work before the May 1998 nuclear tests, when India and Pakistan had only an incipient nuclear weapons capability? That India and Pakistan did not go to war during the Brasstacks and Kashmir crises of 1987 and 1990, respectively, is not reassuring. Nuclear attack or the threat of nuclear attack is an ever-present possibility for small, *de facto* nuclear-weapon states before they acquire secure second-strike forces, i.e., the capability to withstand a first nuclear strike and to retaliate with strategic nuclear forces that can impose unacceptable damage on the attacker. Whether India and Pakistan had a second-strike capability

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3 See 'Nuclear Posture Review Leaks: Outlines Targets, Contingencies', *Arms Control Today* 32:3, 20.

4 On virtual abolition, see Molander and Wilson (1994, 35–36).

during the Brasstacks (1987) and Kashmir (1990) crises is an open question. After the release of the Draft Nuclear Doctrine (DND) by India's National Security Advisory Board (NSAB) in August 1999 we now know that India intends to build 'an open-ended, potentially huge, triadic (land, air, and sea-based) nuclear force of enormous lethality' (Vanaik 2001) with a 'strategic' second-strike capability. Four years before the nuclear tests, K. Subrahmanyam—who played a major role over the years in legitimizing the Indian nuclear arsenal—advocated a modest minimum deterrent of sixty nuclear warheads with a retaliatory capability (Subrahmanyam 1994). Yet during the Brasstacks (1987) and Kashmir (1990) crises it was far from clear that India's nuclear doctrine was to build a credible minimum deterrent, although most analysts agree that it would be relatively easy for New Delhi to hide nuclear weapons and nuclear capable aircraft and missiles in its vast territory, considering the large distances of many Indian military bases and airfields from Pakistan. Yet if India opts for a strategy of dispersal *and* predelegation of launch authority (to increase the prospects for survivability of its nuclear force) it will inevitably increase the dangers of unauthorized or accidental use. This is Peter Feaver's 'always/never dilemma': 'A new proliferator, hard-pressed by regional enemies who pose a credible threat of decapitation, would be likely to adopt a cheaper command and control solution: dispersal and delegation of the authority and ability to use nuclear weapons. But this solution increases the likelihood of an unwanted nuclear use; in a crisis, the official lines of authority could blur and an aggressive junior commander could act precipitously' (Feaver 1992/93, 167). Because of its strategic vulnerability and smaller nuclear weapons capability Pakistan would have even more incentives than India to avoid the danger of decapitation by predelegating launch authority. The point here is that whereas the potential costs of initiating a nuclear strike were prohibitively high for the superpowers (and nuclear deterrence was 'robust') under mini-arsenal conditions nuclear decision makers may believe that first use of nuclear weapons is a viable military option. Therefore, before the May 1998 nuclear tests there was no guarantee that NWD would keep the peace for ever in South Asia, considering a history of three interstate wars since 1947, several intrastate conflicts, the possibility of accident, misunderstanding or misperception, and the problem of making credible deterrent threats when nuclear weapons were not supposed to exist. Uncertainty about an adversary's ability to carry out deterrent threats creates an incentive to launch a preemptive attack on it; even though uncertainty may have a certain dissuasive effect in the 'gray area' between delayed weaponization ('level 3 opacity' and covert weaponization ('level 4 opacity') (see Table 2).

The idea that NWD may keep the peace between regional rivals is arguably a revised version of Kenneth Waltz's neorealist justification of overt horizontal nuclear proliferation ('more may be better') as a source of international and regional stability. Devin Hagerty and Peter Lavoy, two leading representatives of proliferation optimism, quote Waltz to support the claim that NWD also has 'stabilizing effects' (Hagerty 1995/96, 81; Lavoy 1995, 725 and passim). Yet in the early 1980s Shai Feldman (a disciple of Waltz) came to a quite different conclusion

using the Waltzian framework. Feldman persuasively argued that proliferation would have stabilizing effects in the Middle East only if Israel *abandoned* the policy of deliberate ambiguity regarding its 'bomb-in-the basement' while adopting an *overt* nuclear deterrence posture (Feldman 1982). One may argue *a fortiori* that Waltz's claim (1981) that 'more [horizontal proliferation] may be better' only applies to *overt* proliferation and that even from a Waltzian perspective NWD does not necessarily guarantee bilateral or regional stability. Yet for the reasons examined in Chapters 3 and 4, overt proliferation in South Asia turned out to be worse (Sagan 2003, 90–108) and stabilizing nuclear deterrence after the May 1998 nuclear tests became an impossible game. The frequency of inflammatory statements during the post-tests nuclear crises showed that the nuclear taboo (Tannenwald 2007) was either weak or totally nonexistent in India and Pakistan. Moreover, as Kapur (2007, 175) notes, the nuclear danger did not necessarily discourage conventional violence, that could have escalated to the nuclear level in a crisis. After the 2001–2002 military standoff, India's 'Cold-Start' military doctrine created the possibility of inadvertent escalation to the nuclear level in future crises (Kapur 2007, 181).

The Ambiguities of Non-Weaponized Deterrence in the Literature

Deterrence can be generally defined as 'the use of threats of harm to prevent someone from doing something you do not want him to' (Morgan 1983, 17).[5] International security analysts have focused on deterrence as the use of threats of military retaliation to 'prevent an adversary from using military force to achieve foreign policy objectives' (Huth 1988, 15). Nuclear deterrence involves the credible threat and capacity to inflict nuclear punishment, or 'unacceptable damage' in response to a conventional or nuclear attack (Snyder 1961, chap. 1; Tarr 1991, 58–63). During the Cold War, the theory of nuclear deterrence postulated that the possession by both superpowers of nuclear armaments made a nuclear exchange highly unlikely, since each side was frightened off the use of its weapons by the near-certainty of retaliation. The only requirement was that both sides had a credible second-strike capability.

By this conceptual framework, 'non-weaponized' deterrence is a contradiction in terms, since deterrence is essentially an *overt* nuclear strategy, based on a credible and clearly communicated rational threat of nuclear use under certain conditions specified in the threat. Even in the case of deterrence by denial (the closest theoretical proxy to NWD) the deterree must be 'fairly certain that the deterrer will fight a threatened denial action if he has appropriate [nuclear] forces; the essential question for the aggressor, therefore, is whether these forces are

5 See also Goldfischer and Graham (1992). On the meaning and conditions for 'minimal deterrence' after the Cold War, see Sur (1993).

strong enough to prevent him from making gains' (Snyder 1961, 16).[6] In other words, deterrence by denial also requires an *overt* nuclear strategy based on readily available nuclear weapons and the certainty of their use in case of aggression. The credibility of deterrence threats is, by definition, seriously undermined in an NWD situation. For classical deterrence theory deterrence threats had to convey the certainty of the retaliatory strike; there was uncertainty only as to *where and when* it would occur. For non-weaponized deterrence theory, however, 'maybe' states must leave uncertain: (a) the question of whether they have nuclear arsenals, and (b) their *willingness* to use nuclear weapons in a crisis or conflict situation (Schulz 1987, 192–93).

Hagerty (1993, 259) acknowledges the problem of the credibility of nuclear threats in an NWD situation, in the absence of convincing evidence that either side can carry out such threats.[7] He attempts to circumvent this problem by claiming that during the 1990 Indo-Pakistani crisis over Kashmir nuclear deterrent threats were transmitted from Islamabad to New Delhi (in May 1990) by Deputy National Security Adviser Robert Gates, who succeeded in defusing the crisis (Hagerty 1995–1996, 101). Yet the US successful mediation in 1990 did not guarantee that India and/or Pakistan would not threaten to use nuclear weapons in future crises over Kashmir, as they did during the 1999 Kargil crisis and the 2001–2002 border confrontation. Hagerty's claim that credible nuclear threats can be faithfully transmitted by a third party (e.g., through statements to the local press, or via declarations of US policymakers) is difficult to accept when one learns that during India's Operation Brasstacks Pakistan may have sent a message to India on 28 January 1987, via an Indian journalist who delayed publishing his story for purely commercial reasons (Cohen 1990, 177).[8]

The whole history of Indo-Pakistani relations, even during the period of bilateral detente (1972–1979) is a dramatic testimony to the inability of both parties to overcome the traumatic experiences of partition, four interstate wars (1947–1948, 1965, 1971, and 1999) and a state of intermittent war in Kashmir and the Siachen Glacier. This has generated a regional strategic culture of fear and mistrust that has seriously hampered confidence-building efforts (see Dixit 1995). One cannot safely assume that NWD would actually work in a crisis situation, considering that

6 Deterrence by denial involves the capacity to deny territorial gains to the enemy, including two kinds of measures: (a) the ability to protect offensive nuclear capabilities through dispersal and sheltering, and (b) a credible deployment of conventional ground, sea, and tactical air forces, including tactical nuclear weapons. See Schulz (1987, 182).

7 Hagerty does not consider threats of 'denial' action (e.g., using tactical nuclear weapons) because his concept of 'existential' deterrence is purely based on '[an] aircraft-borne, countervalue balance of terror' (see Hagerty 1995/96, 112) even though there are quite plausible scenarios of deterrence by denial in the South Asian context (see below).

8 *The Observer* (London) published the interview by Indian journalist Kuldip Nayar to Pakistan's chief nuclear administrator A.Q. Khan on 1 March 1987 when the Brasstacks crisis was over. The true story behind this message remains unclear.

during the Brasstacks crisis of 1987 '*both* sides sent false information over the hotline that connected the two armies, and ultimately the hotline itself simply fell into disuse' (Asia Society Study Group 1995, 17).

Like 'weaponization', 'non-weaponized deterrence' (NWD) is a very elastic concept. An often quoted definition of NWD is that a country has a non-weaponized nuclear *posture* when (a) it is one or several 'screwdriver turns' from weaponization or (b) it keeps nuclear warheads separated from delivery systems. Weaponization can be defined as 'the process of developing, testing, and integrating warhead components into a militarily usable weapon system … The first necessary step in weaponization therefore is to design and test a weapon…' (Joeck 2000, 137). However, some scholars do not include the nuclear testing requirement in the definition of weaponization. For example, Subrahmanyam (1998), Kampani (1998) and other Indian scholars argue that Prime Minister Rajiv Gandhi authorized the 'weaponization' of the Indian nuclear program in 1988, eight years before the May 1998 nuclear tests.[9] The fundamental difference between Indo-Pakistani nuclear relations before and after May 1998 is that before the nuclear tests there was necessarily no transparency in their strategic interactions, since the 'screwdriver turn' option was by definition covert. The pre-testing period was characterized by a high degree of uncertainty since neither side knew for sure whether the other side kept its stockpile of fissile material separated from the non-nuclear components of the warhead (disassembled weapons) or whether they *did assemble nuclear weapons* ('ready to go') but did not mate them with the aircraft tasked with the nuclear strike mission. Yet despite those uncertainties—that were inherent to a non-weaponized deterrence situation—some scholars argued that atomic capabilities on both sides had led to moderation in Indo-Pakistani strategic interactions. For example, according to four South Asian specialists, 'Pakistani infiltration into Kashmir since 1988 and sustenance of transborder support to insurgency would almost surely have led to an armed response by India had they occurred a decade or two ago' (Morgan M.G. et al. 1995, 164; see also Reiss 1995, 209). Along the same lines, Hagerty claimed that NWD played an important role in the peaceful resolution of the 1990 Indo-Pakistani crisis over Kashmir and then preserved a relatively stable nuclear peace in South Asia. That the apparent 'stability' of the 1990s was not so stable is shown by the fact that less than a year after the 1998 nuclear tests India and Pakistan fought a war in the snowy peaks of Kargil in Kashmir. In 1995 Hagerty presented 'the existence of Indian and Pakistani nuclear weapon capabilities' as 'the chief foundation for peace in the region', claiming that 'nuclear rollback would increase the chances of a future South Asian war', without

9 Kampani (1998, 14) describes India's secret nuclear arsenal that came into existence in 1988 as follows: 'Nuclear devices were miniaturized to facilitate delivery from aircraft. Weapon designs were made rugged enough for field deployment and transport. Arming and safety systems were installed in weapon systems to prevent unauthorized or accidental detonations. And by 1989, the Indian Air Force had modified combat aircraft and perfected techniques for the aerial delivery of nuclear munitions'.

considering the possibility of *both* regional denuclearization and enough mutual confidence to make progress in parallel negotiations on Kashmir, thus defusing the danger of conventional war.[10]

Perkovich (1993, 1994) and the Asia Society Study Group (1995, 16–18) conceived NWD more cautiously, as a verifiable nuclear arms control *regime* that could stabilize Indo-Pakistani nuclear relations, eventually leading to Jonathan Schell's 'weaponless deterrence'. Two years before the May 1998 nuclear tests, Perkovich (1996) made a downright pessimistic assessment, describing Indo-Pakistani nuclear relations as a zero-sum game that seemed to leave little room for the minimum of cooperation (tacit bargaining) required by a non-weaponized nuclear deterrence posture.

On the other hand, the concept of an NWD *regime* is also ambiguous. Some analysts (see e.g., Sundarji 1994, 8) considered a moratorium on the production of fissile material for nuclear weapons an essential element of the regime. Yet General Sundarji took the gigantic step of conflating two completely different concepts: minimum nuclear deterrence (essentially an *overt* nuclear posture) and non-weaponized deterrence by means of certain 'tacit understandings'. Yet the problem in South Asia is precisely *how to arrive* at such understandings, given a long history of mistrust and misperceptions. For example, in 1988 it seemed that India and Pakistan were edging toward a permanent regime of bilateral cooperation, and yet the spiral of fear and mistrust reemerged during the Kashmir crisis of 1990, showing the *crisis-proneness* of their relationship. According to other scholars (see e.g., Sahni 1996, 92) an NWD regime could still have been established *without* a bilateral fissile materials cutoff, although recognizing that such a regime would have been inherently unstable.

The Ambiguities of 'Opaque Proliferation' and the Indo-Pakistani Strategic Relationship

Cohen and Frankel (1991) first developed the concept of 'opaque' nuclear proliferation. At least four levels of nuclear opacity can be distinguished (Feaver 1993, 175–77).

Level 1: characterized by the absence of a nuclear weapons program. The country has the basic nuclear knowledge and nuclear research or power reactors that could someday be exploited for military purposes. This is Schell's concept of weaponless deterrence: countries deter each other with the *knowledge* that if threatened, a victim could choose to develop nuclear weapons.

Level 2: minimum weaponization. The country has all the nuclear and non-nuclear components available to build nuclear weapons on short notice. It has

10 See Hagerty (1995–1996), 112, and 113, note 96. On the complexity of the Kashmir dispute, see Wirsing (2003, 193–243). On parallel strategies for achieving solutions to the 'several Kashmir problems' see Cohen (1995, 134–35).

unassembled, untested atom bombs, and it is not bound by non-proliferation commitments. This is sometimes described as having crossed the 'nuclear weapons threshold' or being 'just a screwdriver turn away' from weaponization.

According to Feaver, at this level, the proliferator need not concern itself with problems of command and control, 'since any minute degree of uncertainty suffices to deter an adversary'. Feaver (1993, 176) identifies this second level with Bundy's existential deterrence: 'opacity breeds uncertainty, and uncertainty breeds existential deterrence'. The enemy of a proliferator would be deterred from any preemptive strike because of the uncertainties imposed by opacity.

Level 3: delayed weaponization, until the country faces a crisis that forces rapid weaponization. The country assembles nuclear warheads, but keeps them separate from delivery systems, without developing a command and control system and without facing up to the operational dilemmas created by the possession of a small nuclear force. This is arguably the most dangerous form of opacity: 'The military do not develop a use doctrine, nor do they practice with the weapons which are themselves segregated from the rest of the force structure. . . The risks of aberrant behavior are greatest precisely because the opacity has inhibited preparing the national leadership for weighing the trade-offs wisely' (Feaver 1993, 177). Arguably Israel during the Yom Kippur war of 1973 was at this level of opacity, confronting serious nuclear operational dilemmas and having very little time to resolve them.

Level 4: covert weaponization while refusing to acknowledge nuclear weapon-status. Here the arsenal has many of the features of an open nuclear capability, including a nuclear use doctrine and a command, control, and communications system. This is arguably the level of opacity of Israel's 'bomb in the basement' (Harkavy 1991). It must be distinguished from an *overt* minimum nuclear deterrence posture.

Table 2 summarizes the four levels of nuclear opacity and three alternative nuclear strategies: denuclearization, non-weaponized deterrence (NWD) and minimum deterrence.

In the mid-1980s—before Rajiv Gandhi's weaponization decision in 1988—India and Pakistan were arguably still at *level two opacity,* or *many* screwdrivers away from having a readily deployable nuclear force. Early in the 1990s they moved close to delayed weaponization (level 3) until Pakistan froze the production of highly enriched uranium and key nuclear weapons components in July 1991 (Spector, McDonough and Medeiros 1995, 97).

Before the May 1998 nuclear tests, proliferation optimists claimed that NWD had a calming effect on Indo-Pakistani relations. Yet as the Cuban missile crisis shows, in a nuclear crisis there is always the possibility of misinformation, misjudgment and miscalculation, with the related risks of escalation and accidental or unauthorized use (Fetter 1996, 177–78; McNamara 1992). Proliferation optimists overlooked these problems, assuming that peace in South Asia had already been achieved (which certainly was not the case) and sidestepping the real

Table 2 Levels of opaque proliferation and nuclear strategies before the May 1998 nuclear tests

	Nuclear Strategies		
Levels of Opacity	**Denuclearization**	**Non-weaponized Deterrence (NWD)**	**Minimum Deterrence**
1. Weaponless Deterrence	*De facto* denuclearization	Easy, no fissile material produced. Bomb *does not* exist	Not applicable
2. Minimum Weaponization (existential deterrence)	Roll back easy. Bomb still not supposed to exist ('several screwdrivers away' from weaponization)	Fissile material produced but bombs disassembled and kept separate from rudimentary delivery system. Temporary situation	Difficult. Bombs not supposed to exist
3. Delayed Weaponization	Roll back still easy but short time lag for weaponization	Assembled bombs are kept separate from delivery system. Dangerously unstable. Possible irrational use in crisis/war situations	Difficult. Bombs not supposed to exist
4. Covert Weaponization ('Bomb in the Basement')	Roll back difficult but possible (South Africa)	Easier than in 3, but difficult to convey credible deterrence threat since nuclear status denied	Easier than in 1, 2, and 3 above but still command and control problems in the absence of nuclear doctrine

issue: how to rollback India's and Pakistan's nuclear weapons programs within a global framework of nuclear disarmament.

How stable was NWD? As the prospects for war became more likely during an Indo-Pakistani crisis, e.g., over Kashmir, the pressures to weaponize to assure retaliation would certainly mount; as General Sundarji conclusively showed in his imaginary (though quite 'real') India-Pakistan nuclear war-game scenarios.[11]

11 See Sundarji 1993, Chapter 3, 'Can Non-Nuclear India Fight Nuclear Pakistan?', 21–48; and Chapter 4, 'Disaster', 49–57.

As Susan Burns (1994, 4) points out, 'Level two opacity'—that is, minimal weaponization—could soon decay in a crisis into hasty weaponization'. Therefore the real issue was how would India and Pakistan move beyond nuclear ambiguity to either nuclear arms control and disarmament or declared minimum nuclear deterrence.

Existential Deterrence is Not the Same as NWD

Proliferation optimists conflate the concepts of 'non-weaponized' and 'existential' deterrence (see e.g., Hagerty 1993; Reiss 1995, 184–85). Yet they clearly have different meanings. The concept of existential deterrence was elaborated by McGeorge Bundy on the basis of the 'terrible and unavoidable uncertainties' surrounding nuclear war scenarios, to describe a situation in which the mere existence of already deployed nuclear weapons and the fear of escalation deters both sides from a conventional conflict. 'As long as we assume that each side has very large numbers of thermonuclear weapons which *could* be used against the opponent, even after the strongest possible pre-emptive attack, existential deterrence is strong' (Bundy 1984, 8–9). It clearly does not apply to the non-deployed, non-assembled nuclear weapons of emerging nuclear nations.

Yet before the May 1998 nuclear tests, Hagerty argued that existential deterrence *was* at work between India and Pakistan because both sides to the conflict 'knew' that the other had the capability to produce and deploy nuclear weapons on short notice (Hagerty 1993, 259). However, this was a big assumption, considering that in certain pre-tests war-games uncertainty about the other side's capability to deploy nuclear weapons quickly in a crisis could lead to an early use of undeclared *tactical* nuclear weapons in a counterforce fashion. For example, Pakistan had strong incentives to use undeclared tactical nuclear weapons to prevent India from a successful counter-offensive into its territory, e.g., if India had secured a bridgehead inside Pakistan; there was a large concentration of Indian troops in a limited space, and most troops were in the open without any cover. In such scenario, why would Pakistan refrain from using undeclared tactical nuclear weapons? The logic of the situation was well illustrated by the following dialogue among Indian decision makers in one of General Sundarji's hypothetical scenarios:

> If Pakistan continues the way she is behaving in Kashmir, as you yourself said earlier we have no option but to go to war conventionally. Suppose we did that; also assume that our counter-offensive in the plains penetrated some distance into Pakistani territory, and involved a river crossing, with our troops in a bridgehead getting ready to break out. *Assume also that Pakistan believes that we do not have any ready-to-use nuclear weapons.* Will she desist from using nuclear weapons against our bridgehead in her territory? *No! She will not hesitate.* After such use, is she going to be afraid of nuclear retaliation from a big power? There will be one big furore in the UN etc. but the thrust will be to

> stop the fighting and to end the possibility of any further use of nuclear weapons (Sundarji 1993, 42).

This was a plausible scenario in the pre-tests Indo-Pakistani conflicts (Brasstacks, 1986–87, Kashmir, 1990) and a major limitation of a deterrence policy based on deliberate ambiguity. Why would Pakistani decision makers decide to use undeclared nuclear weapons first in this scenario? Because even if they believe that India *will go to war* if Pakistan continues supporting the Kashmiri insurgents, they can still have serious doubts that the Indians have weaponized their nuclear capability. Moreover, even if they assume the latter they can still doubt that the Indian political leadership will make the decision to retaliate with nuclear weapons, risking escalation to all-out nuclear war (see Sundarji 1993, 110). Existential deterrence is presumably the benefit of NWD. Yet in this scenario, it does not prevent escalation from a conventional conflict to nuclear first use, and possibly all-out nuclear war. As General Sundarji shows, military strategists of both regional rivals can only keep counter offensive conventional operations below the assessed nuclear-reaction threshold of the other side when they know for sure that it has the capability to retaliate with nuclear weapons. If in spite of nuclear deterrence conventional war breaks out between two regional rivals, 'it would be the endeavor of both sides not to push the other to a limit where use of nuclear weapons in desperation becomes highly probable' (Sundarji 1993, 90).[12] Yet at the first three levels of opacity they lack that knowledge, and even at the fourth level (covert weaponization) they may not have all the relevant information if their intelligence agencies fail to obtain it and it is not provided by extra-regional powers such as the United States. One could argue that NWD has a certain deterrent effect in the gray area between delayed weaponization (level 3 opacity) and covert weaponization (level 4 opacity). For example, unless the calculations indicate a very short conventional war, a potential attacker might be discouraged rather than provoked by doubt about whether the potential victim of aggression might be close enough to a nuclear retaliatory capability to inflict unacceptable damage. Yet mutual perceptions of resolve (or lack of it) could be falsely reassuring. For example, as Sundarji (1993, 110) notes, a Pakistani leadership could wrongly assume that India would not retaliate with nuclear weapons because it is 'a much softer state' than Pakistan.

Before the May 1998 nuclear tests, the *double uncertainty* that characterized NWD increased the danger of escalation from conventional to nuclear war in most scenarios. Why would uncertainty generate stability instead of producing confusion as to (a) what are the capabilities of the other side, and (b) what are the 'rational' options leading to (c) the disastrous nuclear first use decision, thereby producing

12 This *assessed limit* is known as the nuclear-reaction-threshold (NRT). See Sundarji (1993, 90). Pakistan had taken into consideration India's nuclear-reaction-threshold since the Indian nuclear test of 1974, which undoubtedly demonstrated India's nuclear weapons capability.

(d) escalation, the very situation that existential deterrence was supposed to prevent. The Israeli case was different because—unlike India and Pakistan before May 1998—it had clearly made a proliferation decision (it *had* the 'bomb in the basement') and the Arab countries *knew* that Israel had weaponized.

Proliferation optimists claimed that preventive or preemptive military attacks were highly unlikely in the Indo-Pakistani military equation, because both rivals could easily protect their virtual nuclear forces by adopting dispersal techniques (see e.g., Lavoy 1995, 719–28). Yet there was not enough empirical evidence to support the hypothesis that India and Pakistan had achieved effective measures to reduce the vulnerability of their virtual nuclear forces (Sagan 1995). Sagan shows that organizational imperfections in incipient nuclear forces (such as those of India and Pakistan in the mid-1990s) may make pre-emptive strikes effective, in spite of efforts to develop dispersal plans for nuclear capable aircraft or ballistic missiles. During the 1971 Indo-Pakistani war both countries launched a pre-emptive strike (unsuccessful, in the case of Pakistan, successful, in the case of India) in spite of efforts on both sides to protect air forces from conventional strikes. The other case of deterrence failure in South Asia is the Indo-Pakistani war of 1965, in which Pakistan was *not* deterred from attacking India, despite the expectations of traditional conventional deterrence theory (see Ganguly 1990).

There is plenty of examples of lack of communication between India and Pakistan during the Brasstacks (1987) and Kashmir (1990) crises (see next section) showing that the war-game scenarios considered by Gen. Sundarji in *Blind Men of Hindoostan* are quite plausible. For example, India could have launched a pre-emptive attack against Pakistan's conventional delivery systems (which included a variety of nuclear-capable fighter-bomber aircraft, such as the US supplied F-16s, or the French-supplied Mirage) wrongly believing that the latter did *not* have the capability to retaliate with nuclear weapons.[13]

The Brasstacks (1987), and Kashmir (1990) Crises: Can a Stable 'Balance of Terror' be Established in South Asia?

In February 1993 CIA Director James Woolsey testified before Congress that South Asia presented the 'most probable prospect' for the future use of nuclear

13 This is the 'disaster' scenario considered by Gen. Sundarji in Chapter 4 of his book. The Indian Air Force begins conventional attacks against Pakistani military airfields; Pakistan responds with two 20 kiloton nuclear weapons on Indian airfields, claiming that India was about to launch nuclear weapon armed aircraft from these airfields against Pakistan, and that their own attack was a pre-emptive counterforce action. 'This claim--Gen. Sundarji writes--was a masterpiece of disinformation; the fact was that the Indians had no nuclear weapons ready and available for use' (!) See Sundarji (1993, 55).

weapons in a regional conflict.[14] Scholars are divided over whether the Brasstacks (1987) and Kashmir (1990) Indo-Pakistani crises could have triggered a large-scale conventional war that could have escalated to the nuclear level. Proliferation optimists argue that there was no danger of nuclear confrontation, because the very existence of nuclear weapon capabilities on both sides of the border deterred the South Asian rivals from going to war, knowing that it could escalate to the nuclear level. Proliferation pessimists argue that in both crises there was a real possibility of conventional war and that mutual misperceptions and miscommunications—among other factors—could have led to a nuclear confrontation.

The large-scale Indian military exercise, code-named Brasstacks, began in the Summer of 1986 as a paper simulation followed up in November-December 1986 with field simulations 'by different arms and services to support divisional-corps-level offensive operations in a mobile battle ground environment' (Bajpai et al. 1995, 28; Ganguly 1987). At its height, in January 1987, Operation Brasstacks was as large as some exercises carried out in Western Europe by NATO. It took place in the desert area of Rajasthan, roughly a hundred miles from the Pakistani border, an ideal location from which to launch an invasion into the Pakistani state of Sind that could cut Pakistan in half. It was not over until mid-March 1987.

The Brasstacks crisis seriously increased bilateral tensions, leading to several mobilizations and counter-mobilizations, border skirmishes and exchanges of fire between Indian and Pakistani troops in Kashmir, and an exodus of Indian refugees because of intermittent Pakistani shelling in the border areas. There were serious misperceptions and lack of communications between the political leadership of both countries at the height of the crisis, and complete lack of contact between the chiefs of staff of both armies. The hotline between the director generals of military operations of the two countries was not used at all between December 1986 and January 23, 1987 (Kumar and Bajpai 1995, 176). The gap between the perceptions of each side as to the intentions and actual moves of the other reached very dangerous levels. The fact that Pakistan perceived a real threat to its national existence increased the danger of conventional conflict. The armed forces of both countries were deployed in close and risky proximity to each other all along the common border. A minor incident in this surcharged milieu could have triggered a major military conflict. When the crisis began India had already crossed the nuclear weapons threshold and was at 'level two opacity', whereas Pakistan was close to that level. According to US intelligence estimates and other US sources, Pakistan had obtained a nuclear weapon design from China in the early 1980s and it had the non-nuclear portions of the device. Assuming that Pakistan began to produce weapons-grade uranium at the beginning of 1986, by January 1987 it

14 See testimony of James Woolsey before the Senate Committee on Governmental Affairs, 24 February 1993 (Washington, DC: US Government Printing Office, 1994).

would have produced enough weapons grade material (highly enriched uranium) to build two or three nuclear weapons.[15]

The real political and military objectives of India in undertaking Brasstacks remain unclear. Yet by providing Pakistan with the wrong information about the duration of a gigantic military exercise on its border, and deploying its military forces in a provocative manner, India precipitated a crisis that arguably could have led to a nuclear confrontation, considering that Pakistan already had a 'crude' nuclear weapons capability and the means to deliver nuclear weapons, while the Indian Army leader, General K. Sundarji, reportedly decided to integrate India's tactical nuclear weapons into the day-to-day field maneuvers of the troops (Hersh 1993, 59). The crisis probably led Pakistan to make the decision to fully weaponize its nuclear program. After the Brasstacks crisis nuclear weapons definitely entered the Indo-Pakistani strategic equation.[16]

Scholars are divided on the question of whether there was a real danger of a conventional war that could have escalated to the nuclear level during the Brasstacks crisis. Seymour Hersh's (1993) controversial article shows that the crisis clearly had a nuclear dimension. Yet proliferation optimists tend to downplay the danger of escalation to nuclear use during the crisis. They argue that the Brasstacks crisis led to several confidence-building measures (CBMs) that would lay the foundations for non-weaponized deterrence and a 'crude form of nuclear stability' in South Asia (Ganguly 1995, 13; Ganguly 2008; Joeck 1991, 87).[17] On the other hand, some proliferation pessimists argue that the real intention of the Indian government to undertake the Brasstacks military exercise was to provoke a preventive war with Pakistan. According to Sagan (2003, 94) 'The preventive war motivation behind [General] Sundarji's plans helps to explain why the Indian military did not provide full notification of the exercise to the Pakistanis and then failed to use the special hotline to explain their operations when information was requested by Pakistan during the crisis'. Proliferation optimists (see e.g., Hagerty 1998, 106–107) argue that there is insufficient evidence to support the preventive

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15 According to a 1986 memo prepared for Henry Kissinger, then a member of the president's Foreign Intelligence Advisory Board, Pakistan's uranium enrichment plant at Kahuta had the nominal capability to produce 'enough weapons-grade material to build several nuclear devices per year'. Quoted in Albright and Hibbs (1992). Several press stories in July 1986, citing Reagan Administration sources, stated that Pakistan was considered to have the capacity to build nuclear arms. 'By the Fall of 1986, a "Special National Intelligence Estimate," circulated to senior US officials, had concluded that Pakistan had produced weapons-grade material' (Spector and Smith 1990, 95). On the other hand, by January 1987, assuming the use of plutonium from the CIRUS reactor, India had enough weapons-grade plutonium available to produce at least fifteen (15) nuclear weapons. See Spector (1988, 93, table 2, and 142–43).

16 On Pakistan's probable decision to 'weaponize', see Bajpai et al. (1995, viii). On the indirect nuclear dimension to the crisis, see Bajpai et al. (1995, 3, 6, 12–13, 15, 39–40, 90, and 106–107).

17 The term 'crude form of nuclear stability' belongs to Ganguly (1996, 74).

war argument. On the other hand, Perkovich (1999, 13) has argued that in January 1987 rather than preventive war, Indian Prime Minister Rajiv Gandhi considered the possibility of launching a *preemptive* attack on Pakistan's 'Army Reserve South [that] would have included automatically an attack on Pakistan's nuclear facilities' before Pakistan could initiate war with India.[18] Even if the Indian government did not intend to provoke a preventive war (as Sagan argues) or to carry out a preemptive strike to eliminate the possibility that Pakistan might initiate a war (as Perkovich argues), there is enough empirical evidence of a spiral of mutual misperception and miscommunication during the crisis (see Bajpai et al. 1995 passim) to support the claim that there was a real danger of a conventional Indo-Pakistani war that could have escalated to the nuclear level.

The crisis reached its highest point on 23 January 1987, when the two countries made several saber-rattling declarations and there was a flurry of diplomatic activities aimed at deescalating the crisis. On 24 January, Indian troops advanced to the border, on the grounds that Pakistan had not withdrawn its troops from front-line positions after winter exercises (Bajpai et al. 1995, 168). On 28 January, Indian and Pakistani troops exchanged fire in Kashmir, while both countries announced diplomatic negotiations to resolve the crisis. On 31 January, India-Pakistan official-level talks began in New Delhi, while pro forma saber-rattling statements continued on both sides. On 4 February, the India-Pakistan consultations yielded an agreement envisaging a sector-by-sector pullout of troops deployed on the border. Analysts agree that the Rajiv Gandhi-Zia summit meeting (known as cricket diplomacy) which took place on 21 February, came after the crisis, not during it, and had nothing to do with its resolution, except perhaps for the symbolic meaning of Zia's trip to India. On 3 March Rajiv Gandhi told the Indian Parliament that India had the capacity to defend itself from a possible nuclear threat from Pakistan.[19] On 21 March, one month after the 'cricket summit', Pakistani President Zia called for a nuclear dialogue with India while denying that Pakistan had *made* the nuclear bomb. Yet two days later he stated that Pakistan had the capacity to build the bomb whenever it wanted to, but would not do so first or unilaterally (Kumar and Bajpai 1995, 175 and 178–79). The most important post-Brasstacks confidence-building measure was the December 1988 Indo-Pakistani Agreement on Prohibition of Attack on Nuclear Installations and Facilities (Reiss 1995, 198).

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18 There is a fundamental difference between a *preventive* war and a *preemptive* war. The latter means an attack against an adversary that is about to strike. A preventive war is a move to prevent a potential threat from fully emerging. According to Sagan (2003, 94), General Sundarji designed the Brasstacks exercise 'in hopes of provoking a Pakistani military response. He hoped that this would then provide India with an excuse' to carry out a *preventive* strike against Pakistan's incipient nuclear weapons program.

19 This statement was probably for domestic consumption, and did not mean that India had actually assembled and deployed a 'bomb in the basement' (covert weaponization, or level 4 opacity).

The Kashmir Crisis (1990)

In the Spring of 1990 Muslim separatists escalated their militancy against Indian rule in the state of Jammu and Kashmir, which had been incorporated into India after the partition of the subcontinent in 1947, when India and Pakistan became independent from Great Britain. Pakistan questions the legality of the accession of Kashmir to India, accusing India of not implementing a United Nations Security Council resolution calling for a plebiscite to determine the wishes of the Kashmiris. India claims that the accession of Kashmir to India in 1947 was legal, and became 'final and irrevocable' after the Constituent Assembly of Kashmir declared in November 1956 that the state 'is and shall be an integral part of India'.

Both countries have fought four wars (1947–48, 1965, 1971, and 1999) since 1947, three of them (1947–1948, 1965, and 1999) over Kashmir. In 1990 they were at the brink of a conventional military conflict, when India accused Pakistan of actively supporting the Kashmiri Muslim insurgency. There were large troop deployments on both sides of the border. The Pakistani army conducted its large Zarb-e-Momin military exercise, while the Indian army reportedly moved three divisions into Kashmir and one extra division into Punjab to forestall possible Pakistani military actions. At the height of the crisis Pakistan apparently 'placed its nuclear weapons arsenal on alert' (Hersh 1993, 65).

What are the differences between Brasstacks and Kashmir? In 1987 the global strategic environment still 'contained' the Indo-Pakistani conflict. The United States and the Soviet Union were interested in preventing a war between their clients, because of fear of escalation from a regional conventional war to a global nuclear conflict. Also, Pakistan was tied up in a two-front strategic predicament because of the Soviet presence in Afghanistan, thus diminishing the prospects for a conventional conflict with India, even if as Bajpai et al. note, 'in retrospect [during the Brasstacks crisis] the chances of war were considerably greater than the American intelligence and policy communities thought' (Bajpai et al. 1995, 82). By contrast, by 1990 the global strategic environment no longer 'contained' the Indo-Pakistani conflict. Superpower disengagement from regional affairs made the Kashmir crisis of May 1990 more dangerous than the Brasstacks crisis of 1987. In 1990, United States-Soviet cooperation diminished the likelihood that the superpowers would risk, as they had in 1965 and 1971, threatening each other on behalf of their South Asian allies (Rudolph 1989, 23).

The nuclear dimension of the Brasstacks crisis of 1987 was only *indirect.* It is not clear whether there was 'nuclear signaling' on the part of Pakistan (General K.M. Arif, vice-chief of the Pakistani army staff, denies it vehemently) and, if so, whether it was successful. Some argued at the time that a nuclear threat *was* transmitted to India during an interview given by Pakistan's chief nuclear administrator, A.Q. Khan to Indian journalist K. Nayar, published on 1 March 1987 by *The Observer* (London). Khan claimed that Pakistan had enriched uranium to weapons grade ('but now they know we have done it'), adding that 'nobody can undo Pakistan or take us for granted. We are here to stay and let it

be clear that we shall use the bomb if our existence is threatened'. A.Q. Khan later denied such declarations, claiming that he was tricked into the interview. It is doubtful that this message was conveyed to India at the proximate time of the crisis, the worst part of which had passed at the time of the interview, although there were skirmishes on the India-Pakistan border in Kashmir on 28–29 January 1987. On 31 January India-Pakistan delegations talked for four-and-a-half hours on deescalating tensions (Bajpai et al. 1995, 40 and 170–71).

Because the United States did *not* transmit deterrence threats from Pakistan to India during Brasstacks, it is disputable whether a third party can effectively transmit deterrence threats during nuclear crises between opaque proliferators. If NWD greatly depended on the role of the United States in transmitting deterrence threats, could one trust that the United States (or as Hagerty claims, the 'nonproliferation community') would effectively do so, on the basis of the historical record? This problem would persist if India and Pakistan revert to an NWD posture (e.g., after signing the Comprehensive Test Ban Treaty (CTBT) and a bilateral or global Fissile Material Cut-off Treaty (FMCT). In the absence of a comprehensive settlement of the Kashmir dispute their bilateral relations will be still characterized by deep mutual fears and mistrust. The lesson of the Brasstacks crisis for future Indo-Pakistani crises is that if the South Asian rivals cannot meaningfully transmit deterrence threats to each other they may not be able to rely on the United States to transmit those threats, which increases the danger of nuclear use by accident or miscalculation.

The Kashmir crisis of May 1990, on the other hand, had a *direct* nuclear dimension. One or both sides *most likely* issued nuclear threats and there was a real danger of nuclear confrontation during the crisis (Hersh 1993). In 1987 the United States dangerously downplayed the gravity of the Brasstacks crisis and might have not been able to successfully intervene to negotiate a diplomatic resolution in case of conflict (see Bajpai et al. 1995, 90–91). By contrast, in May 1990 the United States saw a clear risk of an Indo-Pakistani conventional war with a *genuine* danger of escalation to a nuclear exchange, and sent deputy national-security adviser Robert M. Gates to negotiate a resolution of the crisis.[20]

Proliferation optimists claim that India and Pakistan were deterred from going to war over Kashmir in 1990 because of NWD (Hagerty 1995–1996, 107–108 and 114; Reiss 1995, 209; Lavoy 1995, 723–28). However, the evidence in that respect is sketchy, mainly based on a counterfactual argument: the fact that India and Pakistan did not actually fight a war in 1990 as a result of the crisis. Other writers are more cautious. George Perkovich claims only that NWD *might* have worked in the subcontinent before the May 1998 nuclear tests if 'enough mutual

20 On the US perception of the Brasstacks crisis, see Bajpai et al. (1995), Chapter 4, 'America: The Influential Observer', and Kumar and Bajpai (1995, 171). The US perception of the Kashmir crisis is summarized by Richard Kerr's statement that it was 'far more frightening than the Cuban missile crisis'. Kerr was deputy director of the CIA in May 1990. See Hersh (1993, 56).

confidence' enabled them to engage in building a non-weaponized deterrence *regime* (Perkovich 1994, 112–113). With the benefit of hindsight we know that in the next eighteen years India and Pakistan were unable to establish such a regime, and instead continued their nuclear competition, testing nuclear weapons in May 1998.

An NWD regime is very different from Hagerty's 'power of suggestion' thesis. Hagerty (1993, 280) claims that 'at the opaque proliferation level, existential deterrence is the *only* logical form of mutual deterrence, since relative capabilities are not a factor in the deterrence equation'. However, he overlooks the above-mentioned four levels of opacity. Had India and Pakistan moved into delayed weaponization (the most dangerous form of opacity, see Table 2) they would have faced all the operational problems described by Sundarji and Feaver, particularly the 'always/never dilemma' between avoiding a devastating first strike and an increasing danger of unauthorized use. According to Feaver, NWD (weapons not assembled) requires an assertive (as opposed to a delegative) command system (Feaver 1992/93, 171; see also Sundarji 1993). Yet we do not know whether India and Pakistan had adopted such a system before testing nuclear weapons in order to deal with the 'always/never dilemma'. In the case of India, as of 1994, 'there [was] no evidence of the existence of elaborate Command, Control, Communications and Intelligence (C3I) machinery, nor of plans to integrate nuclear-weapon application to military doctrine' (Bhimaya 1994, 649–50).[21] In the case of Pakistan, 'the most authoritative study of Pakistani nuclear doctrine emphasizes that no serious effort was made to develop either a doctrine or a secure command and control system until after the [May 1998] nuclear tests' (Hoyt 2001, 961). Even if an assertive command system is the 'logical' posture for NWD, a delegative system (to avoid decapitation) is a permanent temptation, and the risk of unauthorized use is exacerbated by conflicts such as Kashmir and, particularly in the case of Pakistan, the 'nuclear coup d'etat' scenario.[22]

A Missed Window of Opportunity: Denuclearizing South Asia before the May 1998 Nuclear Tests

Before the Indian and Pakistani nuclear tests of May 1998 proliferation optimists claimed that NWD would keep the peace in South Asia, leading to a dangerous acceptance of the nuclear status quo in the subcontinent on the part of both South Asian and US policy-makers. This state of affairs may have convinced India and Pakistan that the time-consuming and arduous work of negotiating a meaningful

21 India's Draft Nuclear Doctrine formulated by the National Security Advisory Board (NSAB) was only announced in August 1999.

22 The classical example of an attempted nuclear coup d'etat occurred during the April 1961 rebellion of French army forces stationed in Algiers. On the nuclear coup d'etat, see Dunn (1982, 91).

settlement of their outstanding disputes was unnecessary. The tacit acceptance of the pre-tests 'no war/no peace' situation in South Asia led US policy-makers to underestimate the possibility of a replay of the April/May 1990 crisis in Kashmir, that actually happened nine years later, this time resulting in a war—the Kargil war—less than a year after the May 1998 nuclear tests that were supposed to make Indo-Pakistani nuclear relations even more 'stable' than under NWD. Four years before the nuclear tests, K. Subrahmanyam argued that deterrence stability could be easily achieved if both sides adopted a no-first use strategy, coupled with effective conventional arms reductions and real, effective confidence-building measures (see Subrahmanyam 1994). Yet none of the predictions of proliferation optimists came into existence: India and Pakistan were again on the brink of an all-out conventional war during the 2001–2002 border confrontation, and rather than embarking on conventional arms reductions and confidence building measures, the two countries began a conventional and nuclear arms race.

The roots of the South Asian nuclear predicament can be traced back to the period of non-weaponized deterrence (NWD) between 1986–1987 and 1998. The perception that 'stable' nuclear deterrence was already working in South Asia placed the rollback non-proliferation strategy in the back burner, after Secretary of Defense William J. Perry declared that the nuclear weapons capabilities of India and Pakistan emerged from a dynamic that the United States was unlikely to be able to influence in the near term. As a result—Perry said in a talk before the New York-based Foreign Policy Association—'Rather than seeking to roll back—which we have concluded is unattainable in these two countries—[the United States had] decided, instead, to seek to cap their nuclear capabilities.'[23] Yet the 'capping strategy' was a failure (see Chapter 5) and India and Pakistan managed to keep the nuclear weapon option unconstrained (Perkovich 1999, 351–66). Had US policymakers, South Asia experts and nonproliferation scholars realized that it would be very difficult—if not impossible—to stabilized NWD they would probably have put more pressure on India and Pakistan to roll back their nuclear weapons programs. After all, as late as May 1996, Indian strategic experts such as Bajpai (1996) and P.R. Chari (1996)—who opposed an Indian nuclear test and supported India's membership in the CTBT—still had a voice in the domestic political debate in India, arguably neutralizing the nuclear hawks, who failed to convince Indian Prime Minister Narasimha Rao to approve a nuclear test in December 1995 (Perkovich 1999, 353).

As the Asia Society Study Group recognizes, an NWD regime must keep a delicate balance between 'the degree of opacity that will protect nascent nuclear weapons systems in both countries' and 'the degree of transparency that will ensure that neither country has progressed to the point where it can surprise the other side' (Asia Society Study Group 1995, 17). This is a daunting task. Perkovich admits that the major drawback of an NWD regime is that 'the ready potential to weaponize makes such a relationship perpetually unstable' (Perkovich 1993, 112–13). If the

23 Quoted in Harrison (1997, 405).

purpose of such a regime is to eventually negotiate mutual nuclear inspections, why not negotiate mutual inspections to *denuclearize*, thus avoiding the problem of cheating which would unravel a nonweaponization regime in the first place? (see Perkovich 1993, 113–15). Unfortunately, the lack of political will and the profound mutual mistrust that characterized Indo-Pakistani nuclear relations in the 1990s precluded the option of negotiating a mutual nuclear inspections regime patterned on the Argentine-Brazilian model (see Carranza 1995, 105–107). On the other hand, although it would have not solved the South Asian nuclear predicament, an NWD regime (a 'middle of the road' solution) would have been better than doing nothing, even though it would have only formalized a state of nuclear ambiguity without eliminating the dangers of NWD, particularly in crisis situations.

The denuclearization of South Africa (Fischer 1993) and the Argentine-Brazilian trilateral agreement with the IAEA show that with enough political will the verification problems involved in nuclear rollback are not insurmountable.[24] Considering the bigger size of India's nuclear program, before the May 1998 nuclear tests Pakistan had stronger incentives than India to sign a mutual nuclear inspections regime. India would have also benefited from such a regime, which would have eliminated the latent nuclear threat from Pakistan without having to join the NPT, or signing the Comprehensive Test Ban Treaty. Had they followed the Argentine-Brazilian model, India and Pakistan would have avoided the post-tests costly nuclear and missile arms race. Moreover, mutual nuclear inspections would have strengthened the South Asian Association for Regional Cooperation (SAARC), paving the way for bilateral and regional economic cooperation and integration, thus improving the lives and security of more than a billion people who are held hostage by the Indo-Pakistani nuclear competition.

The non-proliferation literature wrongly assumes that nuclear proliferation is a unilinear process, following several steps in the proliferation 'ladder': first a capability decision, second, exercising the nuclear weapons option (normally with a nuclear test) and finally a full-fledged nuclear weapons program that would necessarily result in the acquisition of a second-strike capability, with adequate delivery systems (aircraft and/or ballistic missiles), a nuclear doctrine, and secure command, control, communications, and intelligence (C3I) systems.[25]

Yet the end of the Cold War challenges the unilinear model of nuclear proliferation. Assuming that before the May 1998 nuclear tests India and Pakistan were at level two opacity (minimum weaponization, see Table 2) they could still have rolled back their nuclear weapons programs. The primary impetus for a bilateral or regional nuclear disarmament regime came from the progressive movement toward global nuclear disarmament since the end of the Cold War. Because of the weight of the global norm against proliferation and new international factors and regime priorities (such as linkages between non-proliferation and Western willingness to provide foreign

24 On the Argentine-Brazilian trilateral agreement with the IAEA as a model for Indo-Pakistani mutual nuclear inspections, see Carranza (1995, 105–107).

25 See e.g., the concept of a 'proliferation ladder' in Dunn and Overholt (1977).

investment and loans, or the need to preempt economic sanctions) India and Pakistan could have chosen to roll back their nuclear weapon programs to the *first* level of opacity (virtually non weaponization of the arsenal) as Pakistan had apparently done since July 1991 (Spector, McDonough, and Medeiros 1995, 97). From there they could have moved toward a nuclear renunciation agreement; even in the absence of a final settlement of the Kashmir dispute.[26] There is some evidence that India would have been amenable to such an agreement, and Pakistan would have probably followed suit, considering its long-standing support for nuclear arms control and disarmament in the region as long as India took the first steps in that direction. In March 1996 the Rao government declared in the Conference on Disarmament that it 'did not believe that the acquisition of nuclear weapons [was] essential for national security'. As Perkovich (1999, 347) notes, Indian Prime Minister Rao and Finance Minister Manmohan Singh believed that 'India's future security and well-being depended on an economics first strategy. They wanted to encourage this line for its intrinsic merit and because they hoped it would diminish the role of nuclear weapons and ballistic missiles in India's strategic calculations'. The domestic political battle against pro-bomb advocates in the 'strategic enclave' was not easy, but arguably there was enough convergence between the Rao-Singh 'economics first' strategy and US non-proliferation policy (the 'capping strategy', see Chapter 5) to obtain an Indian commitment to a bilateral agreement with Pakistan to freeze the production of fissile materials as a first step toward nuclear roll back. Unfortunately, the Clinton administration did not take advantage of this opportunity; and instead decided to focus on improving bilateral relations with India while preventing it from testing nuclear weapons. During his visit to India in January 1995, US Defense Secretary William Perry emphasized 'Washington's interest to cooperate more closely with India on defense matters' and 'pleased his hosts by not pushing the nuclear issue' (Perkovich 1999, 355).

An Indo-Pakistani nuclear renunciation agreement could have been patterned on the Argentina-Brazil-IAEA trilateral model, but with more stringent verification requirements, following the experience of the IAEA in South Africa. Such an agreement would have included China, considering Indian security concerns about that country's nuclear weapons program. After China signed and promised to ratify the CTBT, a Chinese commitment not to use or threaten to use nuclear weapons against the parties to a regional nuclear arms control regime in South Asia became more credible.[27]

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26 On the possibility of decoupling the Kashmir dispute from the nuclear issue, see Carranza (1996, 569–70).

27 In a speech at the Committee on Disarmament (CD) in Geneva, Chinese President Jiang Zemin 'reiterated China's support for the CTBT and pledged ratification' (Rajain 2005, 177). Although India and China have not yet arrived at a final settlement of their border dispute, Sino-Indian relations have significantly improved since the end of the Cold War. See e.g., Burns (1996); Clad (2004). For additional reasons why the China factor is

Conclusion

Before the May 1998 nuclear tests, the tacit acceptance of NWD on the part of certain regional actors and policy-makers, including some American officials who witnessed the 1990 Kashmir crisis (see Krepon and Faruqee 1994) was dangerous. As we have seen, the Brasstacks crisis had the potential to escalate to the nuclear level, considering the serious misperceptions and lack of communications between the political and military leadership of both countries at the height of the crisis, and the fact that India had already crossed the nuclear weapons threshold while Pakistan had the capability to produce two or three atom bombs on short notice and a variety of nuclear-capable fighter-bomber aircraft to deliver them.

As we have seen, the Kashmir crisis of 1990 could also have escalated to the nuclear level. Even if one admits that some form of NWD was at work during this crisis, its fragility as a non-proliferation policy is shown by the fact that (a) it did not last forever and both countries decided to go overtly nuclear by testing nuclear weapons in May 1998; despite strong international opposition to their nuclear programs, especially after the indefinite extension of the NPT in 1995 and the signing of the CTBT in 1996, and (b) even after the nuclear tests nuclear deterrence was an impossible game, as shown by the transformation of Indo-Pakistani nuclear relations in a sort of 'permanent Cuban missile crisis' with the Kargil war in May–June 1999 and the 2001–2002 border confrontation.

Some advocates of NWD argued that the nuclear rollback option and/or NPT membership was not feasible, because of the 'domestic political backlash such a step would generate' (Asia Society Study Group 1995, 27; Hagerty 1995/96, 112). Yet in 1990–95 it was not clear at all that the nuclear hawks (the 'strategic enclave' and the so-called 'weaponeers', see Perkovich 1999) would win the domestic political debate in India on whether or not to exercise the nuclear weapon option. Nuclear diplomacy was not on top of the foreign policy priorities of the Rao, Gowda, and Gujral administrations; they were much more concerned with solving India's economic crisis and attracting foreign investments and were prepared to make some concessions to the Western powers on the nuclear issue. For example, at the Clinton-Rao summit in May 1994, 'Rao did reportedly give Clinton a general assurance that India would not deploy ballistic missiles in the near term' (Perkovich 1999, 347); and he declared that India's stand was 'to bring the Non-Proliferation Treaty (NPT) in line with what India can accept' (Deshingkar 1998, 25), opening up the possibility of Indian accession to the NPT under certain conditions. It was only after the indefinite extension of the NPT in May 1995 and the signing of the CTBT in September 1996 that the strategic enclave and the 'weaponeers' gained the upper hand in the domestic political debate in India.

The indefinite extension of the NPT in May 1995 hardened India's determination to resist US pressures to adopt binding non-proliferation commitments; in what

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not an insurmountable obstacle to regional nuclear arms control in the subcontinent, see Carranza (1995, 109, 122–23).

amounted to an isolationist nuclear diplomacy, and an abandonment of the Nehruvian anti-nuclear tradition. Yet before 1995 those proliferation optimists who argued that nuclear rollback in South Asia was not feasible completely ignored the impact of the end of the Cold War on nuclear decision making in Third World countries. Moreover, the domestic politics explanation for the impossibility of nuclear rollback neglects the fact that 57 percent of Indian public opinion held that it should maintain its present posture, which included support for a fissile material production cutoff and (until 1995) a consistent advocacy of a comprehensive test ban (CTB) to halt the vertical proliferation of nuclear weapons.[28]

In the 1990s, India and Pakistan had military security incentives to keep the nuclear weapons option open: for Pakistan, the 'Indian threat'; for India, its security concerns about the Chinese nuclear threat, and to deter Pakistan from supporting the Kashmiri Muslim insurgency. Yet one could argue that the new international situation created by the end of the Cold War and economic globalization would constrain the nuclear diplomacy of both India and Pakistan, making them more sensitive to outside pressures for military restraint and regional arms control. With the end of the Cold War in 1990, more cooperative global and supra-regional strategic environments arguably isolated the Indo-Pakistani conflict. Both the United States and Russia had disengaged themselves from South Asia. Sino-Russian, US-Russian, and Sino-US relations were predominantly cooperative. As a result, the 'big three' were not likely to risk renewed confrontation to protect their former South Asian allies and the latter could no longer play off one superpower against the other. Moreover, one could argue that in the post-Cold War era, economic globalization and the primacy of economics—among other factors—strengthened the disincentives for countries with a nuclear weapon option to declare nuclear weapon status: (1) the strengthening of the non-proliferation regime (indefinite extension of the Non-Proliferation Treaty (NPT) in May 1995; signing of the CTBT in 1996) put additional pressures on those countries to sign both treaties or adopt equivalent non-proliferation commitments; (2) Economic globalization was compelling them to redefine the meaning of national security. Arguably, economic security was becoming more important than military security, and sooner or later countries like India and Pakistan would have to recognize the global trend.[29]; (3) international political and economic disincentives: the risk of diplomatic isolation and the alienation of great powers such as the United States, Japan, and Germany, who might help India and Pakistan solve their economic difficulties; (4) Issue linkage: violators of the global norm against proliferation could increasingly be subject to pressure in the economic issue area, thus discouraging 'threshold' countries from exercising the nuclear weapons option; (5) the risk of economic,

28 The public opinion figure is taken from Ganguly (1996, 79).

29 For example, when Pakistan's Prime Minister Nawaz Sharif took office on 17 February 1997, Pakistan was on the brink of bankruptcy, badly needing the goodwill of the International Monetary Fund (IMF). See 'Pakistan: Sharif 2', *The Economist*, 8 March 1997, p. 36.

political, and even military sanctions by Western powers or the United Nations (e.g., the suspension of US economic and military aid to Pakistan in 1990 in accordance with the Pressler Amendment); (6) the risk of nuclear accidents and unauthorized seizure (the 'nuclear coup d'etat' scenario); (7) In the case of India, a peaceful reputation. India's nuclear diplomacy in the 1950s and 1960s was strongly anti-nuclear: 'A prime example of India's diplomatic activism on the nuclear issue is Prime Minister Jawaharlal Nehru's 1954 proposal at the UN for a universal nuclear test ban' (Hymans 2006, 174). Nehru's daughter, Prime Minister Indira Gandhi even said in 1978 that India did not want nuclear weapons because 'they only bring danger where there was none before'. India had to pay the price of diplomatic isolation for its intransigent opposition to the Comprehensive Nuclear Test Ban (CTBT) in 1995–1996. After the signing of the CTBT in 1996 progress toward a global cooperative security regime would isolate India and Pakistan even further, including the possible threat of Western political and/or economic sanctions. Truly, the inability of the five declared nuclear weapon states to commit themselves to a timetable for the elimination of nuclear weapons gave India some breathing space. However, the nuclear-weapon states had four powerful incentives to take further steps toward denuclearization: (1) the economic costs of keeping a nuclear arsenal and the diminishing role of nuclear weapons in providing for their national security, (2) the retention of such weapons posed several risks to their security, including accidents and unauthorized launches, (3) the danger of nuclear terrorism, (4) the risk of nuclear use, with devastating consequences for the nuclear weapon states themselves.[30]

The first lesson of the pre-tests nuclear period in South Asia is that NWD was a delicate game of mirrors that could have failed at any time, leading to the first regional nuclear war in history.[31] The second lesson is that nuclear deterrence cannot be premised on uncertainty regarding the status of the other side's undeclared nuclear arsenal, leading to worst-case assumptions. For example, Subrahmanyam (1994, 194) claimed that since Pakistan was in a position to assemble 'at least' one nuclear weapon (based on declarations by the Pakistani Foreign Secretary in 1992) India had to 'prudently' assume that Pakistan had acquired 'a few' nuclear devices. The obvious result of worst-case assumptions is a nuclear (and missile) race. The third lesson is that mutual misperceptions and miscommunications during

30 A good summary of these risks appears in Goodpaster Committee (1997). See also Statement on Nuclear Weapons (1996).

31 S. Paul Kapur (2007) includes the Brasstacks crisis in a 'non-nuclear period' in Indo-Pakistani security relations that goes from 1972 through 1989 (Kapur 2007, 85–91) and then discusses the 'de facto nuclear period' from 1990 through 1998 (Kapur 2007, 92–114). In my view, including the Brasstacks crisis in a 'non-nuclear period' is confusing, because at the time (1986–1987) both countries had enough weapons-grade fissile material (in the case of India, plutonium; in the case of Pakistan, highly enriched uranium) to be considered de facto nuclear weapon states, even if they were still at level 2 opacity (minimum weaponization, see Table 2).

Indo-Pakistani crises create a real danger of conventional war, with a potential to escalate to the nuclear level.[32] The fourth lesson is that NWD only makes sense as a temporary non-proliferation strategy, leading to a regional denuclearization regime which must necessarily be linked to global nuclear disarmament efforts. In the absence of serious steps toward bilateral or regional nuclear arms control minimum weaponization can easily evolve into delayed weaponization (which makes NWD dangerously unstable) and then either covert weaponization or overt nuclear deterrence as in the case of India and Pakistan after the May 1998 nuclear tests.

After the indefinite extension of the NPT in May 1995 and the signing of the CTBT in September 1996, global nuclear disarmament efforts gained momentum and it was possible to envisage the marginalization of nuclear weapons from international politics. The indefinite extension of the NPT was the crowning event of the decade from 1986 to 1995, a 'golden age of nuclear threat reduction' (Walker 2000, 710). In that context, one could imagine that India and Pakistan would accommodate the world trend. Instead, 'India struck out defiantly against it on grounds that the NPT extension meant the eternal legitimation of nuclear weapons and the system of "nuclear apartheid"' (Perkovich 1999, 353). Yet the documents that accompanied the indefinite extension of the NPT in 1995 expressly committed the nuclear weapon states to nuclear disarmament, even if they did not contain the time frame demanded by India. For many years, India had asked for a comprehensive test ban treaty and a fissile materials cutoff treaty and now that they appeared likely influential members of the Indian government and hard-line commentators were against India joining them. In its efforts to improve relations with India, the Clinton administration failed to condemn such duplicitous foreign policy behavior.

Why didn't India and Pakistan follow the global trend toward the marginalization of nuclear weapons after the end of the Cold War? The next chapter seeks to answer this question. Most of the literature on the May 1998 nuclear tests emphasizes the impact of domestic political factors, i.e., how the nuclear hawks and the pro-bomb 'strategic enclave' managed to create the domestic political momentum for India to 'go nuclear' when the Bharatiya Janata Party (BJP) came to power in March 1998. Yet such a momentum was facilitated by a marked deterioration of international nuclear relations which began in the mid-1990s: 'Negotiated treaties were not ratified, proposals for new treaties lay dormant, and the air was again filled with recrimination' (Walker 1998, 506). An important factor was the renewed military utility attached to nuclear weapons by the United States. In January 2000 the Clinton administration announced that the United States intended to keep its nuclear arsenal indefinitely, refusing a Russian proposal to go down to 1,500 nuclear weapons on each side in then envisaged START III

32 On the role of misperceptions in Indo-Pakistani relations, see Stephen P. Cohen, 'Image, and Perception in India-Pakistan Relations'.

talks (Schell 2000, 30–31).[33] In South Asia, non-weaponized deterrence (NWD) still gave India and Pakistan a false sense of 'security' even after the Brasstacks (1986–1987) and Kashmir (1990) crises, until the whole proliferation optimistic argument fell apart in 1998–2002. In the absence of a regional nuclear arms control regime, NWD only kept a negative and fragile 'cold' peace in the subcontinent until the May 1998 nuclear tests. Unfortunately, Indira Gandhi's premonition that 'nuclear weapons only bring danger where there was none before' became a grim reality at the turn of the century. The Kargil war, fought less than a year after the tests, showed the urgency of establishing a robust nuclear arms control regime, to eliminate the threat of a nuclear exchange in the subcontinent, with its devastating consequences for millions of people in South Asia.

33 In the 2000s the George W. Bush administration re-legitimized nuclear weapons as weapons of war as official US nuclear doctrine, further facilitating Indian claims that the United States paid lip service to nuclear disarmament while practicing 'nuclear apartheid'.

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Chapter 3
South Asian Security after the Indian and Pakistani Nuclear Tests[1]

Introduction: India, Pakistan, and the International Nuclear Order

The Indian and Pakistani nuclear tests of May 1998 challenged the International Nuclear Order and its linchpin, the Nuclear Non-Proliferation Treaty (NPT). Since India and Pakistan were not treaty members, they did not formally violate the accord by testing, but their behavior violated the norm against nuclear proliferation—the conviction that acquiring nuclear weapons is not legitimate behavior—that had been strengthened when Argentina, Brazil, South Africa, Ukraine, Kazakhstan, and Belarus joined the treaty in the early 1990s. As Walker (1998, 505) notes, after the Indian nuclear tests of 11 and 13 May 1998, 'there was a palpable sense of violation, of hard-won and cherished norms being trampled by an exultant India, and of neighbors being threatened with intimidation'. One of those neighbors was Pakistan. Despite the Clinton administration's efforts to dissuade Pakistan from demonstrating its own nuclear weapons capability (see Talbott 2006, 58–71) two weeks after the Indian nuclear tests Pakistan followed suit, becoming the first Islamic nation with an openly declared nuclear weapons capability and increasing the sense of crisis provoked by the Indian tests. On 27 May 1998 Pakistan's Prime Minister Nawaz Sharif appeared on television proclaiming triumphantly: 'Today we have settled the score [with India]'.

The May 1998 Indian and Pakistani nuclear tests damaged the NPT-centered International Nuclear Order in two ways. First, they weakened the norm against proliferation, even if they did not break international law because they are not NPT parties. Second, they deprived the NPT of universality. Without India, Pakistan, and Israel, it became more difficult to implement the nuclear disarmament plan of action embodied in the 'Thirteen Practical Steps' agreed upon at the 2000 NPT Review Conference. The United Nations Security Council unanimously condemned the Indian and Pakistani nuclear tests and the United States imposed a variety of economic sanctions mandated by the Glenn Amendment. UN Security Council

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1 Portions of this chapter are drawn from Mario E. Carranza, 'Indo-Pakistani Nuclear Relations: Can the Genie be Put Back into the Bottle?' *International Politics*, Vol. 36, No. 4 (December 1999), pp. 441–63, reproduced with permission of Palgrave Macmillan; and from Mario E. Carranza, 'An Impossible Game: Stable Nuclear Deterrence After the Indian and Pakistani Tests', *The Nonproliferation Review*, Vol. 6, No. 3 (Spring-Summer 1999), pp. 11–24, reproduced with permission of the Monterey Institute of International Studies.

Resolution 1172 of 6 June 1998 required India and Pakistan to conduct no further nuclear tests and called them 'immediately to stop their nuclear weapon development programs' and to join the NPT as non-nuclear weapon states. As Bajpai (1999, 29) notes, despite the debate in the nuclear weapon states on how to deal with the challenge represented by the Indian and Pakistani nuclear tests, at the time, there was 'rather strong support for the global nuclear order in its present form'. Writing three years after the tests, Kampani (2001, 19) argued that since India was unlikely to give up nuclear weapons, 'the focus of US policy should shift towards insulating the nonproliferation regime from the potential aftershocks of India's nuclearization'. Yet it became very difficult to isolate the nonproliferation regime and the international nuclear order from Indo-Pakistani nuclear relations. As the Bush administration made the distinction between 'good' and 'bad' proliferators, while engaging India as a strategic partner (see Chapter 5), the nuclear deal with India undermined the INO-NPT regime raising the question of whether the NPT was on its way to irrelevance.

In order to understand India's complex relationship with the international nuclear order it is necessary to review India's nuclear diplomacy before and after the entrance into force of the Non-Proliferation Treaty (NPT) in 1970. India decided not to join the NPT because of its discriminatory nature: it established a distinction between nuclear haves and nuclear have-nots, with different rights and obligations, and India was excluded from the nuclear club even though it tested a 'peaceful nuclear device' (that was indistinguishable from a nuclear weapon) in May 1974.

India has always had an ambivalent attitude toward nuclear weapons. India under Nehru played a major role in international disarmament negotiations in the 1950s. Yet as Frey (2006, 21) notes, Nehru also 'paved the way for the country's development of nuclear weapons by creating the necessary infrastructure'. Frey (2006, 23) also points out that India's 'main motive in challenging the global nuclear order had less to do with its perception of this order as a source of insecurity than as a source of injustice and subjugation. Accordingly, the security dimension of the nuclear order was less imminent and the Indian nuclear discourse focused more on a national interest defined in terms of status'. In the end, rather than the unfairness of the international nuclear order created by the NPT the main reason for India's challenge to that order was that it would not recognize India as a great power and a great civilization with a 'natural' right to sit at the table with the Western great powers. Perkovich (1999, 332) argues that before the nuclear tests, in 1992–1993, 'issues of national identity and equity' explain the resistance of Indian elites to US attempts to persuade them to accept binding nonproliferation commitments. Yet as soon as the Bush administration fully opened the door to accept Indian membership in the nuclear club (with the Next Steps in Strategic Partnership agreement in 2004 and the US–India nuclear deal in 2006–2008) the Indian government quickly forgot about 'nuclear apartheid' and stopped condemning the inequity of the NPT regime. Once India was accepted as a non-NPT member of the nuclear club, Indian Prime Minister Manmohan Singh said that by signing the nuclear deal with the United States, India had now joined 'a new nuclear world order'. India has been characterized as a 'semi-challenger' to

the international order, but it is actually playing an important role in redefining the international nuclear order by becoming a member of what one may call the post-Cold War/post 9/11 great power concert. The Indian nuclear tests of 11 and 13 May 1998 did challenge the international nuclear order, but they were also a very effective way of negotiating India's entrance to the nuclear club.

Despite the many social and economic constraints on India's emergence as a potential great power,[2] one may argue that it is an 'emerging power' (Cohen 2001) but the real issue is whether it will emerge as a 'dissatisfied power' or as a 'status quo power'. Those who argue that the United States must recognize India's inevitable emergence as a great power fail to make that distinction, assuming that it will emerge as a 'status quo power'. India's rapprochement with the United States during the George W. Bush administration (2001–2009) seems to point in that direction. Yet India has a long record of challenging the international order as a dissatisfied power, and there is no reason to believe that once it becomes a full-fledged nuclear weapon state it will behave as a status quo power. If, as Mearsheimer (2001, 3) argues, 'all great powers are revisionist and primed for offense', it is hard to imagine why India would be an exception to this iron law of offensive realism.

The Indian and Pakistani test explosions show that non-weaponized deterrence (NWD) is at best a temporary condition, evolving sooner or later into a 'bomb in the basement' or an *overt* nuclear deterrence posture that create pressures for nuclear and missile arms racing to acquire a reliable second strike capability (Feaver 1993, 176). The nuclear tests changed Indo-Pakistani nuclear relations, moving both countries to a less opaque but not yet fully transparent stage, between declared nuclear weapon status and the actual deployment of a small nuclear force. Because both countries had not yet matched nuclear warheads with delivery systems there was still a small room of maneuver for diplomatic dialogue and nuclear arms control negotiations. Both countries had promised to sign the Comprehensive Test Ban Treaty, in exchange for the lifting of US economic sanctions (see Chapter 5 and Talbott 2006, 183–84). Yet had India and Pakistan signed the CTBT (they did not) they would still had been free to assemble and deploy nuclear weapons, and to test and develop nuclear-capable ballistic missiles. Moreover, they would still have faced the 'deploy/not to deploy' dilemma. Although India had somewhat

2 India's high rates of economic growth in the 1990s and the rapid development of the software services sector are often mentioned as 'proof' that India is on its way to becoming a great power. However, that sector accounts for 0.25 percent of the labor force. 'Nearly half of India's total working-age population (15–19 years of age) is unemployed, most of it not even counted as part of the labour force'. See 'The Reality of India, the New "Global Power"', *Aspects of India's Economy*, No. 41 (December 2005), 2, available at http://www.rupe-india.org/41/reality.html. By most economic and social indicators, India is part of the Third World. The social costs of developing a nuclear arsenal are persuasive in a country where 44 percent of the adult population is illiterate and 70 percent have no access to safe drinking water. See Burns (1998a). The figure on adult illiteracy (as of 1999) was obtained from World Bank (2002, 232). India urgently needs to allocate scarce resources to the basic human needs of 350 million Indians who live in absolute poverty.

softened its nuclear diplomacy, declaring that it was prepared to sign a global and non-discriminatory Fissile Material Cut-off Treaty (FMCT) it claimed that its 'strategic deterrent' and its missile development program were non-negotiable [3]

Explaining the Indian and Pakistani Nuclear Tests

Only 48 hours after India's five nuclear explosions of 11 and 13 May 1998, Indian P.M. Vajpayee said in an interview with *India Today* that 'India is now a nuclear weapon state. We have the capacity for a big bomb now, for which a necessary command and control system is in place'.[4] It was a textbook application of deterrence theory. Nuclear threats must be credible. Yet after 24 years of keeping the nuclear weapons option open, India's nuclear weapon status was surrounded by ambiguous declarations that diminished the credibility of the threat to exercise the option. When the new BJP-led government came to office in March 1998, P.M. Vajpayee said it would review the country's nuclear weapons policy and might 'induct nuclear weapons' into the Indian military arsenal. A week before the Indian nuclear tests, Indian Defense Minister George Fernandes claimed that China, not Pakistan, was India's 'potential threat No. 1', that China's military activities and alliances had begun to 'encircle' India and that India should move to declare itself a nuclear weapons state (Burns 1998c).

Both India and Pakistan explained the nuclear tests for security reasons. The BJP-led Indian government justified the test explosions claiming that it was surrounded by two potentially dangerous nations, China and Pakistan. Yet the security model is clearly insufficient to explain India's decision to test nuclear weapons in May 1998. As Frey (2006, 9) notes, 'Why did India develop a nuclear-weapons-capable infrastructure before 1964 in the absence of any nuclear threat? Why did India wait 34 years before it responded to the Chinese nuclear threat that emerged in 1964? Why did India develop the bomb first and only afterwards contemplate how to deploy it? Why did India accept the equalizing effects of nuclear weapons *vis-à-vis* Pakistan which, in so doing, voided much of its conventional superiority?'

Did the 'China threat' justify India's overt nuclearization? India suffered a humiliating defeat in the 1962 border war with China and China's decision to 'go nuclear' in October 1964 opened up a harsh debate on the advisability of producing nuclear weapons in India. The Shastri government decided to remain non-nuclear but the issue lingered on in the 1970s when the official policy of the Congress

3 See declarations by Jaswant Singh, India's senior advisor on foreign policy, reproduced in *PPNN Newsbrief* 43 (Third Quarter 1998), 16. During the Singh/Talbott 'nuclear dialogues' (see Chapter 5) India reportedly 'bluntly rejected' the American demand that it abandon plans to deploy nuclear arsenals. According to Jane's *Defence Weekly* India intended to develop a nuclear triad, of air-, ground- and submarine-launched nuclear weapons. See ibid., 16. See also Bearak (1998).

4 Quoted in Burns (1998b).

governments was to keep the nuclear weapon option open. India refused to sign the CTBT in 1996 claiming that it needed the nuclear weapon option as a hedge against the China threat. Prime Minister Vajpayee in his letter to US president Clinton justified the May test explosions as a response to 'a deteriorating security environment, especially the nuclear environment', and to 'the presence of an overt nuclear weapon state [China] on our borders, a state which committed armed aggression against India in 1962'. He also mentioned China's contribution to Pakistan's nuclear weapons program. Mr. Vajpayee recognized the improvement in Sino-Indian relations in the last decade, but claimed that 'an atmosphere of distrust persist[ed] mainly due to the unresolved border problem'.[5]

China clearly plays an important role in India's nuclear decision making, not only because of Pakistan's strategic relationship with China, but also because India still lacks a full-fledged intermediate range ballistic missile capability that would allow it to achieve threshold deterrence against China (Gordon 1994, 664–72). The nuclear tests and the announcement that *Agni* was ready for deployment convey the message that India wants to achieve threshold deterrence against China. In May 1998, India successfully tested the *Agni,* an IRBM with a range of 1,550 miles (Bearak 1998). While it is possible for China to strike at Indian cities and industrial centers from Tibet, it is not yet possible for India to strike at Chinese cities of equal importance. As Joshi (2007, 5) notes, 'At present, the longest range deployed missile is believed to be the Agni-II with a range of 2,000–2,500 km, and can reach parts of western China'. The Agni-III IRBM—successfully tested in April 2007 and May 2008—with a range of about 3,500 km, will eventually allow India to achieve threshold deterrence against China, i.e., it would be able to threaten key cities in Eastern China, including Beijing, Nanking and Canton, if the missiles were based in the state of Assam, east of Bangladesh.[6]

The Hindu-nationalist Bharatiya Janata Party (BJP) government's claim that the decision to test nuclear weapons was provoked by the 'China threat' is not convincing. As Frey (2006, 17) notes, 'prior to the tests the Chinese government sent out strong signals that its strategic interests, were limited to the Taiwan and the South China Sea issues, and that it had a strong interest in preserving the status quo regarding its south-western border to India'. Moreover, Sino-Indian relations had arguably significantly improved by March 1998, when the BJP came to power in India. After Rajiv Gandhi's visit to China in December 1988 both countries agreed to refrain from the use of 'military capabilities' in bilateral relations and signed four significant confidence-building border agreements in September 1993, including mutual troop withdrawals from the border. A final settlement of the border dispute was a real possibility after Chinese President Jiang Zemin's visit to New Delhi in late 1996, when a fifth border agreement was signed. China is

5 See 'Indian Letter to Clinton on the Nuclear Testing', *New York Times*, 13 May 1998, A12.

6 'According to defense scientists, at least 2 to 3 more tests would be required before [the Agni-III] will be part of the arsenal' (Joshi 2007, 14).

arguably more interested in consolidating its economic miracle than in pursuing expansionist goals in South Asia. Unfortunately, as Cohen (1998) points out, the Indian nuclear tests may have reopened the conflict with Beijing, 'this time with a nuclear tinge'.

On the other hand, Pakistan, not China is India's regional rival in South Asia; the unresolved Indo-Pakistani conflict over Kashmir is more likely to result in war than the Sino-Indian border dispute. Arguably, by the mid-1980s, India was more concerned with Pakistan's incipient nuclear weapons program than with the China threat, although China's continuing modernization of its nuclear arsenal has provided a cover for India's wider nuclear ambitions. Despite the Indo-Pakistani *rapprochement* of 1997, the Pakistanis continued supporting the Kashmiri Muslim insurgency, and Indian military planners had good reasons to be concerned about Pakistan's nuclear weapons program. Nuclear asymmetry with Pakistan was unacceptable. In the words of K. Subrahmanyam, an influential Indian strategic expert, 'only nuclear weapons can deter nuclear weapons'. Yet at the time of the May 1998 nuclear tests both countries were still trying to reconcile their differences over Kashmir at the foreign secretary level, and Pakistan was seeking a wide range of nuclear arms control agreements, all rejected by India. It was unlikely that Pakistan would threaten to use nuclear weapons as a 'cover' to invade Kashmir.

The second rationale for the Indian nuclear tests is the search for 'respect' from the United States and China. Frey (2006) has convincingly shown that the discourse on the nuclear issue among India's strategic elite focused less on the deterrence value of nuclear weapons and more on their symbolic value as a currency of power and prestige in international relations. From this perspective, India's desire for international 'social recognition' was a powerful force behind the decision to test nuclear weapons in May 1998. To what extent India has managed to enhance its international status by openly going nuclear is an open question. With the nuclear deal with the United States (signed in October 2008) and the Nuclear Suppliers Group's decision to lift restrictions on nuclear trade with India in September 2008, India has finally achieved a long-sought recognition from the great powers, as a new member of the nuclear club. Yet as shown by UN Security Council Resolution 1172 of 6 June 1998, the international community unanimously condemned the May 1998 nuclear tests. Rather than gaining 'social recognition' India and Pakistan became isolated, until the progressive lifting of US sanctions (see Chapter 5) and their newly acquired status of frontline states in the US-led 'war on terror' after 11 September 2001.

According to Paul (1998) the main rationale for the Indian nuclear tests was India's search for great power status. From this perspective, going nuclear was a 'systemic imperative', because without 'autonomous [nuclear weapon]capabilities' an emerging great power like India would be likely 'to be dominated, directly and indirectly, by the existing great powers' (Paul 1998, 9). In Paul's view, the reason the United States was asking India to sign the NPT and the CTBT, was to maintain American superiority over India. This is of course the standard Indian rationale for rejecting the NPT-centered International Nuclear Order (INO), vehemently

dismissing it as discriminatory, imperialist, and neocolonialist. India's relationship with the INO is at the heart of its decision to 'go nuclear'. Yet one may argue that since the end of the Cold War nuclear weapons are losing legitimacy as symbols of power, status, and prestige at the *global* level; although they are still a currency of power at the *regional* level. As Sagan (1997, 155) notes, 'The NPT appears to have shifted the norm concerning what acts grant prestige and represent modernity from the 1960s notion of joining "the nuclear club" to the 1990s concept of joining "the club of the nations adhering to the NPT"'. In condemning India's nuclear tests, Clinton argued that a country does not need nuclear weapons to be recognized as a great power by the international community:

> [India is] a very great country…. But to think that you have to manifest your greatness by behavior that recalls the very worst events of the 20th century on the edge of the 21st century, when everybody else is trying to leave the nuclear age behind, is just wrong. …And they clearly don't need it to maintain their security *vis-à-vis* China, Pakistan, or anybody else. So I just think they made a terrible mistake.

Although India and Pakistan have declared themselves nuclear weapon states they have not been recognized as such by the vast majority of the international community. Arguably, they have arrived too late to the nuclear club. Under the Nuclear Non-Proliferation Treaty (NPT), only states that carried out a nuclear test prior to 1 January 1967, are recognized as nuclear weapon states.[7] By this definition, India and Pakistan are 'outside the law' until they join the NPT as non-nuclear weapon states. India has always argued that it will not join the Treaty because of its discriminatory nature (the Treaty makes a distinction between nuclear haves and nuclear have-nots, with different rights and obligations) and because the nuclear haves are not seriously committed to achieve general nuclear disarmament within a certain time frame. This is one of the reasons India has given for not joining the Comprehensive Nuclear Test Ban Treaty (CTBT).[8]

Some analysts believe the real rationale behind the Indian nuclear tests was to enhance the legitimacy of the Indian government, a fragile 14-party coalition headed by the Hindu-nationalist Bharatiya Janata Party (BJP). 'By inciting nationalist fervor, the BJP silenced its fractious coalition partners—assuring the stability of its government and perhaps even paving the way for new elections that could give the party an outright majority' (Beinart 1998; see also David 1998). Yet the initial general euphoria following the Indian nuclear test wound down with the passing of time and the hardship caused by economic sanctions imposed by

7 See Article IX, paragraph 3 of the NPT. The treaty would have to be amended to allow for the admission of India and Pakistan as nuclear weapon states.

8 Other reasons are: the CTBT's verification provisions infringe on Indian sovereignty; the security threats from China and Pakistan; India is at a technological disadvantage to the West; and the United States should relax export controls of nuclear technology.

several Western powers. Two weeks after the nuclear tests the BJP faced a storm of protest in Parliament that reflected growing popular uneasiness about the risks and costs of acquiring nuclear weapons. There were several anti-nuclear marches; in one of them, protesters wore imitation fallout suits; in another, one of the placards read: 'No water, no electricity, no jobs, no problem, "we have the bomb"' (see Burns 1998d).[9] The social costs of developing a nuclear arsenal are persuasive in a country where 48 percent of the adult population are illiterate and 70 percent have no access to safe drinking water (Burns 1998a).[10]

Do domestic factors outweigh 'systemic compulsions' in explaining India's decision to test nuclear weapons? Kampani (1998) has argued that rather than the systemic imperative emphasized by Paul (1998) India's decision to test was determined by four *domestic* factors: 'The ideological worldview of the BJP, its domestic electoral compulsions, the institutional beliefs of India's strategic establishment, and the coalition imperatives of India's nuclear and military research and development bureaucracies' (Kampani 1998, 17). An important domestic factor was domestic public opinion that was shaped in the 1990s by the increasingly influential pro-bomb strategic elite (Frey 2006, passim; see also Abraham 1998). The strategic elite was composed by military strategists such as General Sundarji, politico-strategists, such as K. Subrahmanyam, and India's nuclear scientific community, which 'proved to be the most intransigent and determined proponent of India's full-fledged nuclearization' (Frey 2006, 176). Frey shows how the strategic elite's perception of the international nuclear order as a source of injustice played a crucial role in India's decision to 'go nuclear'. From the strategic elite's perspective, as a rising power, India had the 'right' to have the bomb that had been systematically denied to it by a discriminatory, neocolonial international nuclear order.

The realist security model has some value, because India had a security motivation to declare nuclear weapon status in May 1998, not only to deter a Pakistani or Chinese nuclear attack, but also 'as a global deterrent against the other major nuclear-weapons states, especially the United States and Britain' (Thomas 2002, 11). However, the security model is clearly insufficient to explain India's decision to test nuclear weapons in May 1998. If security considerations alone had determined India's decision to 'go nuclear', it would have tested nuclear weapons after the Chinese test of 1964 (it had the capability to do so) instead of waiting until May 1998.

The alternative, constructivist explanation of the May 1998 nuclear tests is appealing, because by focusing on the discourse of the strategic elite and the internal

9 On 29 May, 1998 there was an anti-nuclear march in New Delhi. On 6 August 1998, thousands of people marched through Indian cities chanting and carrying antinuclear placards to condemn the atomic bombing of Hiroshima on 6 August 1945. See Kazmin (1998). See also 'Anti-Nuclear Protesters Rally in India', *New York Times*, 7 August 1998.

10 The figure on adult illiteracy (as of 1995) was obtained from World Bank (1997, 214).

debate in the Indian elite on the nuclear issue it shows that gaining access to the exclusive 'nuclear club' and recognition as a great power was more important for the Indian strategic elite than the security motivation, even if the strategic elite's discourse was permeated by deterrence theory ('only nuclear weapons can deter nuclear weapons'). The search for the power and international status conferred by nuclear weapons trampled the security motivation. Clearly, India was less secure after the 11 and 13 May 1998 nuclear tests. In the absence of the nuclear tests India would have maintained its conventional military superiority over Pakistan. Yet the Indian tests led to the Pakistani nuclear tests of 29–30 May 1998, after which Pakistan was able to threaten nuclear use if Indian military forces crossed the line of control in Kashmir, and even to 'place at risk India's viability as a sovereign state' (Reiss 1994, 338). As Frey (2006, 197) notes, 'In India's nuclear policy formulation, status-seeking became a basic national interest in its own right'.

An international political incentive for the Indian nuclear explosions was gaining international and regional autonomy and influence: to enhance India's international freedom of action, exert greater influence in international political forums, while becoming an influential power in the Indian Ocean region. India has gained certain international influence after the tests, e.g., to negotiate the entry into force of the CTBT from a position of strength.[11] Yet the nuclear tests do not increase the odds in favor of India's permanent membership in the UN Security Council. The tests can be seen as a strategic misstep, because they unnecessarily confronted the Western powers (bringing about economic sanctions and diplomatic isolation) while worsening India's relationship with Pakistan, China, and the United States (see Cohen 1998).

Why did Pakistan decide to respond to India's nuclear tests with five test explosions of its own? Pakistan has a strong security rationale for openly 'going nuclear': to deter a conventional Indian attack and to achieve nuclear parity, or, in the words of Prime Minister Sharif, to 'settle the score' with India. The Indian threat has always been Pakistan's paramount security concern. After independence, Pakistan fought to a draw two wars with India over Kashmir (1947–1948 and 1965) and suffered a humiliating defeat in the December 1971 war which resulted in the creation of Bangladesh, formerly East Pakistan. After India's peaceful nuclear explosion' of May 1974 Pakistan felt threatened not only by India's conventional military superiority but also by its nuclear weapons capability. Due to India's reticence to accept the two-nation theory, Pakistan has always perceived India as a threat to its very existence as an independent nation state. The anti-Pakistani rhetoric of the Hindu nationalist BJP government that came to power in India in March 1998 revived Pakistani fears that India would attempt to undo the partition of British India and reunite the two countries. The strength of Pakistan's security concerns with the 'Indian threat' is shown by former Prime Minister Ali Bhutto's

11 By being identified in the text of the Comprehensive Test Ban Treaty (CTBT, signed in 1996) as one of the countries that must join, India has acquired an effective veto over the treaty's entry into force.

claim that Pakistan would 'eat grass' rather than forgo a bomb if India produced one.

The second reason Pakistan decided to declare nuclear weapon status is that it made a more aggressive approach to the Kashmir issue safer, 'shielding Pakistan against all-out Indian conventional retaliation and preventing catastrophic defeat despite Pakistani conventional military weakness' (Kapur 2007, 91 and passim). The Kashmir dispute is generally considered the primary motivation behind the Indo-Pakistani nuclear competition, and since May 1998 Kashmir is considered a 'nuclear flashpoint'; or the most likely scenario for nuclear use in the post-Cold War era. The conventional wisdom is that Pakistan will 'never' renounce its irredentist claim on Kashmir because it would be tantamount to relinquishing its raison d'etre as the homeland of the Muslims in South Asia. India would 'never" give up either, because it already controls two-thirds of the territory under dispute, and any of the alternatives would challenge India's secularist ideology while leading to other secessionist initiatives elsewhere in the Indian Union.[12]

The third explanation for the Pakistani nuclear tests of 28 May 1998 is that the nuclear weapons program is very popular in Pakistan; A.Q. Khan, the father of the Pakistani bomb is considered a national hero. Pakistan's difficulties to consolidate its territorial integrity and identity as a single nation-state and the fact that the Pakistani army regards itself as the special expression of the idea of Pakistan help to explain the legitimacy—both among the public and among the military—of the Pakistani nuclear weapons program. Nuclearism (the cult of the bomb) is more pronounced in Pakistan than in India, and the anti-nuclear movement is weaker in Pakistan than in India. On the other hand, as Ahmed and Cortright note, there has been no reasoned political debate on the nuclear weapon option in Pakistan, where the military has always controlled the nuclear weapons program, and, 'in the absence of informed opinion among elected representatives, public opinion has generally accepted official rhetoric' (Ahmed and Cortright 1998b, 7).

After the Indian nuclear tests of 11 and 13 May 1998, Pakistan was under strong international pressure, particularly from the United States, to refrain from testing. Pakistan risked harsh Western economic sanctions that could worsen the already fragile Pakistani economy. By refraining from 'evening the score' with India, Pakistan could have changed the rules of the game in Indo-Pakistani relations; while isolating India diplomatically and obtaining much needed Western financial aid and foreign investment. Yet the inability of the Western powers and China to provide 'air-tight' security guarantees to Pakistan and strong domestic political pressures compelled Prime Minister Sharif to decide to 'restore the strategic balance' by ordering five underground nuclear explosions on 28 May 1998.

Pakistan has made several nuclear arms control proposals (all rejected by India) including offers to accede simultaneously to the NPT, to place both countries' nuclear facilities under IAEA safeguards, and mutual nuclear inspections. Since

12 An excellent presentation of the complexities of the Kashmir dispute appears in Wirsing (2003).

1974 Pakistan has made a proposal every year at the United Nations General Assembly for the creation of a nuclear weapon-free zone in South Asia. India has systematically rejected the Pakistani proposal, arguing that the initiative for the proposal 'should have come from the regional countries', that 'South Asia is an inappropriate region for such a zone'; and that China should be included in it. However, China is the only nuclear weapon state that has endorsed the Pakistani proposal unreservedly and both India and Pakistan have implicitly accepted the existence of South Asia as a distinctive region since they signed the Charter of the South Asian Association for Regional Cooperation (SAARC) in 1985.

Are India and Pakistan more secure after the nuclear tests? Even if one defines 'security' in narrow military terms, both countries are now less secure, considering that the dangers of nuclear war by accident or miscalculation have increased; and the difficulties to establish a stable nuclear deterrence relationship between India and Pakistan. Even before the nuclear tests one could argue that a nuclear weapons capability had not enhanced both countries' security. India's 1974 nuclear test only encouraged Pakistan to develop a nuclear weapons capability of its own in the 1980s. By the early 1990s Pakistan had the capability to inflict unacceptable damage on Indian cities. Pakistan's security in turn was threatened because its nuclear ambitions gave arguments to Indian 'nuclear hawks' on the need to catch up to avoid 'nuclear asymmetry' (Subrahmanyam 1981, 209). Moreover, by 'going nuclear', Pakistan alienated its most important strategic ally: in 1990 the United States terminated all economic and military assistance to Islamabad because of Pakistan's nuclear weapons program.

Interpreting the May 1998 Nuclear Tests: A Qualitative Change in Indo-Pakistani Nuclear Relations?

There are two competing interpretations of the Indian and Pakistani nuclear tests:

1. There was no qualitative change in Indo-Pakistani nuclear relations; the nuclear tests only marked the emergence of a sophisticated form of NWD. From this perspective, despite the rhetorical exchanges that accompanied the test explosions, Indo-Pakistani nuclear relations were still characterized by non-weaponization. Although both countries threatened to assemble and deploy nuclear weapons, there was some empirical evidence suggesting that they had not done so.[13] A possible explanation was that the Indian nuclear tests were carried out to increase domestic support for the BJP

13 According to Stephen P. Cohen, 'technical difficulties, disagreements over control of the weapons, inadequate early warning systems and political considerations all might have slowed the deployment of nuclear-armed air and missile forces… Cohen said in the case of India, there's no evidence of a functioning missile delivery force. It is still largely on paper and several years down the road'. See 'Pakistan, India, "Have Not Moved Very Far"

government, and not with the immediate intention of actually deploying a minimum deterrent nuclear force. India's Defense Minister Fernandes's depiction of the Indian nuclear arsenal as a 'recessed' deterrent lent some credibility to this interpretation. As described by Indian defense analysts, 'recessed deterrence' is basically the same as NWD. Even if it is 'overt', a virtual nuclear weapons capability is still indistinguishable from a non-weaponized nuclear capability. An arsenal of this kind could be kept with the bombs disassembled and 'warehoused' to be deployed only in a crisis.

2. An alternative interpretation is that the nuclear tests mark a qualitative change in Indo-Pakistani nuclear relations, i.e., the passage from non-weaponized or 'existential' deterrence to minimum (and weaponized) overt nuclear deterrence (Walker 1998, 518). This reading of the nuclear tests seems to be confirmed by India's refusal to pledge not to deploy nuclear weapons during diplomatic negotiations with the United States.[14] In the words of Jasjit Singh, an adviser to the Indian government: 'The Americans shouldn't waste time telling us to get rid of nuclear weapons. That decision has been made. The issue now is what kind of nuclear power we are going to be'.[15]

Although the empirical evidence available is sketchy, most analysts believe that India and Pakistan keep their assembled nuclear warheads separated from the delivery systems (aircraft and ballistic missiles). In the case of India, it is unknown whether the assembled nuclear bombs are stored at the air bases with the aircraft tasked with the nuclear strike mission or whether they are stored 5 or 7 miles far from the air bases (Natural Resources Defense Council 2007, 75). It is believed that during the Kargil crisis (May–June 1999) and the 2001–2002 border confrontation both countries 'readied' or 'activated' there nuclear forces, i.e., they actually deployed some nuclear weapons in specific delivery systems.

Whether the first or the second interpretation is true has important implications for US non-proliferation policy. Arguably, before the Kargil crisis and the 2001–2002 border confrontation both countries had a nuclear posture that resembled level 3 opacity (delayed weaponization, see Table 2). After the nuclear tests, Jasjit Singh (a leading military strategist and Director of the government-funded Institute of Defense Studies and Analyses, IDSA) argued that while India should aim at developing a minimum deterrent, 'the end point of the minimum deterrence capability cannot be reached overnight, and nor may it be necessary to try and do it'. Therefore he recommended a nuclear strategy of 'recessed deterrence' that would require 'a non-weaponized status, but where all

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to Field Nukes: Cohen', *The News International* (Pakistan), 13 May 2000 http://www.jang.com.pk/the news/may/2000-daily/13-05-2000/main/main8.htm.

14 Pakistan has offered to sign an agreement not to deploy ballistic missiles in South Asia, but this offer has been rejected by India. See Khan (2003, 71).

15 Quoted by Burns (1998a).

necessary steps for weaponization and its usability have been taken'. Although 'the nature and meaning of "weaponization" had to be defined carefully' they would be, 'for obvious reasons normally kept classified' (Singh, Jasjit 1998, 314, 318, 320). The Kargil and 2001–2002 crises showed that this posture was dangerously unstable; because it could lead to nuclear use due to inadvertence, misperception, or miscalculation (see Chapter 4). As a result, both countries seem to have taken their post-tests 'minimum nuclear deterrence' postures more seriously; especially India (Frey 2006, 105). Therefore, after the two major post-tests crises, the second interpretation seems to carry the day. Minimum nuclear deterrence (MND) is an entirely new 'ball game', with higher stakes and the diffuse promise that because their nuclear weapon capabilities are now in the open it will be easier to stabilize Indo-Pakistani nuclear relations. Several analysts have argued that this is not the case and that lacking the sophisticated technical infrastructure that characterized US-Soviet nuclear relations India and Pakistan will be unable to avoid the dangers of inadvertent accidental or unauthorized use of nuclear weapons in future crises (Erlanger 1998; Ahmed and Cortright 1998, 93–94; Hoodbhoy 1993). To reproduce US-Soviet nuclear relations India and Pakistan would have to establish, even if in miniature, a 'nuclear triad' (nuclear forces simultaneously deployed on land, at sea, and in the air) that would provide them with truly second-strike capabilities, making real the notion of mutual assured destruction (MAD) and the 'stability' of the 'balance of terror'. Yet developing, deploying and maintaining an arsenal of nuclear missiles, including submarine-launched ballistic missiles (SLBMs) is very expensive. Considering Pakistan's economic troubles, it is unlikely to build a nuclear triad, even though it is developing longer-range missiles such as the Shaheen-II that was tested in the first half of 2007. The Indian case is different, because the Indian economy has grown at annual rates of 7–8 percent in the 2000s. Still assuming that the Indian economy will continue growing at the same rates, India's ambitious plan to build a nuclear triad will divert financial resources that could have been invested in economic and social programs to improve the living conditions of millions of Indians who are living in absolute poverty.[16]

16 The most comprehensive study of a possible nuclear triad for India is Nair (1992). According to Burns (1998a), although some Indian nuclear experts advocate the development of a 'nuclear triad', 'many Indian nuclear experts say that such ideas are pipe dreams. Realistically, they say, India's nuclear delivery system is likely to consist for several years of air force fighter-bombers'. Yet India seems to be moving toward a combined aircraft-missile deterrent. It has already deployed the *Prithvi* (a short range, 150-mile missile) and has tested three long-range ballistic missiles (*Agni I*, *II* and *III*) that will eventually allow it to achieve threshold deterrence with China.

Indo-Pakistani Strategic Interactions after the Nuclear Tests

The nuclear tests of May 1998 created a political and diplomatic crisis (with military overtones) between India and Pakistan, increasing mutual fears and mistrust, and undoing the little progress made by Prime Ministers Gujral (India) and Sharif (Pakistan) in late 1997 to improve relations and establish the basis to settle the Kashmir dispute.

Have the nuclear tests significantly changed the military strategic equation in South Asia? There are two competing schools of thought on the subject.

The Nuclear Tests Favor India

Before the May 1998 nuclear tests, Indian advocates of a 'minimum nuclear deterrent' claimed that India could not afford 'nuclear asymmetry' with Pakistan because it would nullify Indian conventional weapon superiority *vis-à-vis* its rival neighbor (Subrahmanyam 1994, 187). After the nuclear tests, a confident India, with a 2-to-1 conventional military superiority *and* a deployed nuclear arsenal might become increasingly aggressive in Kashmir and adopt a more pro-active policy in dealing with Pakistan, sending troops in 'hot-pursuit' of Pakistan-backed insurgents and attacking training camps and bases into Pakistani-held Kashmir without fearing nuclear retaliation from Pakistan (Ayoob 1998).

The argument is that once both regional rivals have nuclear weapons the nuclear arsenals cancel each other out, and Pakistan is at a disadvantage in any conventional war scenario. It is constrained in its ability to mount even a limited conventional attack on India by the latter's conventional superiority and it cannot threaten to use nuclear weapons to deter a conventional attack for fear of Indian nuclear retaliation. The only possible use of the Pakistani nuclear arsenal is as a 'last-resort' weapon, i.e., to deter an Indian conventional attack against Pakistan itself, but India is unlikely to threaten Pakistan's existence, fearing diplomatic isolation and much tougher and prolonged international sanctions than those imposed by the United States and other Western powers after the May 1998 nuclear tests. On the other hand, Ayoob and other scholars argued that despite the Pakistani bomb, India would not hesitate to use conventional forces against a conventional Pakistani attack to 'liberate' Kashmir. Moreover, although Prime Minister Sharif claimed that the Pakistani nuclear explosions had 'evened the score with India'; the Pakistani nuclear arsenal is smaller, and therefore more vulnerable to a preemptive strike, than the Indian nuclear arsenal (Krauthammer 1998; Sagan 2003, 64–65).

The Nuclear Tests Favor Pakistan

Nuclear weapons have been described as the 'great equalizer' in international relations, and the Pakistani test explosions can be seen as an attempt to achieve strategic parity with India. Pakistan has now made clear that it has a 'weapon

of last resort'. If both sides go overtly nuclear India is the loser, because it loses the advantage of more or less permanent conventional military superiority. From this perspective, if India attacks training camps and bases in Pakistani-occupied Kashmir it cannot count on Pakistan's restraint. In June 1998 Stephen P. Cohen rightly pointed out that the Pakistani military had 'developed various nuclear responses—from tactical [nuclear] weapons to an all-out attack on New Delhi and Bombay—to counter any military movement by India across the border' (Cohen 1998). From this perspective, Pakistan *can* threaten the use of tactical nuclear weapons to deter Indian conventional attacks across the line of control in Kashmir. As Cohen (1998) noted, if Pakistan deploy[ed] the *Ghauri* missile with nuclear warheads, 'the lives of Indians in New Delhi, Bombay and a half dozen other cities would depend on the Government in Islamabad—a Government in which it [was] unclear who command[ed] and control[ed] the deployment of nuclear weapons'.

Before the Kargil war (May–June 1999) one could argue that the Pakistani test explosions had not eliminated India's inherent strategic superiority, because in any possible Indo-Pakistani nuclear standoff, 'India [would] be significantly more powerful than Pakistan, most probably by a factor of at least three or four in terms of numbers of warheads and bombs. This inequality [would] be compounded by Pakistan's lack of strategic depth and ballistic missile and space technology in relation to India' (Gordon 1995, 893). From this perspective, flight-testing the *Ghauri* missile on 6 April 1998 was a necessity for Pakistan, considering the vulnerability of the Pakistani air force to Indian conventional counterforce attacks (Arnett 1998). However, after the Kargil war it became clear that the introduction of nuclear weapons dramatically changed Indo-Pakistani strategic interactions; allowing Pakistani leaders to undertake bold military operations across the Line of Control (LOC) in Kashmir, without fear of large-scale Indian retaliation.

Deploying a reliable small nuclear force is costly, and involves a broad range of decisions, from the allocation of mission to services, to required command and control facilities, and whether to acquire up-to-date satellites and ground radars to obtain early warning of a nuclear strike (Kincade 1995, 22, 26). After the May 1998 nuclear tests, India was not in a rush to deploy nuclear weapons. Because the main rationale for the Indian nuclear bomb was to gain international status and acceptance to the exclusive 'nuclear club', Indian strategic analysts and policy makers originally conceived nuclear weapons as 'political' instruments, rather than as weapons of war (Perkovich 1999). India's emerging nuclear force has been described as a 'force in being' 'that can be mutated into weapons of mass destruction if the strategic circumstances so warrant' (Tellis 2003, 98).

The existence of a functioning democracy in India might become an obstacle to the actual deployment of a minimum nuclear deterrent especially if the Indian economy suffers a serious economic crisis in the wake of the December 2008 global financial crisis. Only two weeks after the May 1998 nuclear tests, the issue of the *real* cost of 'going nuclear' was loudly raised by the political opposition to the Hindu nationalists in Parliament. However, with the passing of time all the major Indian political parties learnt to live with the bomb. Even the Congress

Party, that for many years had maintained the policy of keeping the nuclear weapon option open without exercising the option while calling for global nuclear disarmament, now was in favor of keeping the bomb and fixing the damage caused by the nuclear tests, establishing a 'strategic partnership' with the United States and joining the nuclear club. As the Indian economy grew at annual rates of 8 percent in the 2000s, the question of cost was less of an issue as India continued building a nuclear force-in-being, encouraged by the legitimacy conferred to India's nuclear weapon status by the US-India nuclear deal (see Chapter 5). Yet even in the period of nuclear consolidation (Frey 2006, 190–91) the question of cost is still an issue, considering that India is still a Third World country. An economic crisis could generate domestic political opposition to pay the social costs of developing a nuclear arsenal. In the wake of the nuclear tests India increased its military budget by 14 percent, of which a large part will go to nuclear and missile developments. Pakistan has also significantly increased its military expenditures after the nuclear tests, especially after 11 September 2001, when it became an indispensable ally of the United States in the 'war on terror'. Can India and Pakistan afford a nuclear and missile race? Despite India's impressive rates of economic growth in the 2000s, the question of cost may become a hot political issue if the anti-nuclear movement achieves enough 'critical mass' to have a real impact on actual nuclear decision making.[17] The issue is whether India, with more than 350 million people in poverty, can afford a nuclear arsenal that could cost $5 billion to $10 billion over the next decade; possibly many times more (see Burns 1998a).

Weaponization and Minimum Nuclear Deterrence after the May 1998 Nuclear Tests

After the nuclear tests, India and Pakistan have clearly crossed the *political* threshold from a policy of deliberate nuclear ambiguity to declared nuclear weapon status. Yet their contradictory statements regarding the production and deployment of nuclear weapons make it difficult to determine whether they have become 'real' nuclear weapon states.[18] It all depends on how one defines 'weaponization' and minimum nuclear deterrence'.

17 The 'Coalition for Nuclear Disarmament and Peace' has about 200 non-governmental organizations in India and Pakistan. Yet the few critics of the nuclear tests, such as Achin Vanaik, have had a very limited impact on public opinion that has been overwhelmingly influenced by the pro-nuclear members of the strategic elite. See Frey (2006).

18 For example, the statement announcing the Pakistani nuclear tests on 28 May 1998 also said that the long-range Ghauri missile was being capped with nuclear warheads; but this was denied the day after by Pakistan's Foreign Ministry. See *PPNN Newsbrief*, insert (Second Quarter 1998), 5. On the Indian side, although initial declarations talked about 'weaponization' and 'inducting nuclear weapons' into the military arsenal; after the tests, it

'Weaponization' means actually *assembling* nuclear weapons, i.e., fashioning weapon-grade fissile materials (plutonium or highly enriched uranium) into a bomb, by using a workable bomb design' (Albright and Hibbs 1992, 7). Other scholars define 'weaponization' as 'the insertion of warheads in operational delivery systems' (Walker 1998, 518; Perkovich 1993). Minimum nuclear deterrence is a nuclear strategy in which a state inserts nuclear warheads in operational delivery systems (nuclear-capable fighter-bomber aircraft or missiles) deploying 'the minimum number of nuclear weapons necessary to inflict unacceptable damage on its adversary even after it has suffered a nuclear attack' (Wheeler 1992, 250).[19]

Pakistan's Prime Minister Sharif explained the Pakistani test explosions as a response to the 'weaponization' of India's nuclear program: 'This had led to the collapse of existing deterrence and had radically altered the strategic balance in our region'.[20] Before the nuclear tests, some prominent South Asian strategic analysts claimed that non-weaponized deterrence (NWD) provided stability to Indo-Pakistani nuclear relations *precisely because* nuclear weapons were unassembled. For example, Munir Khan, a former head of the Pakistan Atomic Energy Commission (PAEC) wrote in June 1994 that although Pakistan had never possessed a nuclear device, 'the government had taken the necessary measures and precautions to ensure that no one could make or assemble one, much less to go to the stage of having a usable nuclear weapon'.[21] This claim was aimed at convincing the United States that technically Pakistan did not possess a nuclear device and thus obtain the resumption of US economic and military aid to Pakistan that had been terminated by the Bush administration in October 1990. However, while announcing the nuclear tests on 28 May 1998 the Pakistani government claimed that it had not only assembled a nuclear device but also emplaced the nuclear warhead on top of the long-range *Ghauri* missile,[22] thus throwing overboard any presumption of nuclear restraint and with it the 'stability' presumably achieved thanks to NWD.

General K. Sundarji, former chief of the Indian Army staff, agreed with Munir Khan on the stabilizing effect of NWD. According to Sundarji, minimum nuclear deterrence could be achieved without assembling nuclear weapons, provided

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was not clear whether the Indian government had transferred nuclear weapons to the armed forces. A minimally 'safe' command and control system (the Nuclear Command Authority, NCA) was not established until January 2003. On the difficulties faced by India to actually deploy a reliable minimum deterrent force, see Burns (1998a).

19 There is disagreement in the literature as to what level of nuclear forces should be deemed 'minimum'. See Wheeler (1992, 277).

20 'Pakistani's Words: "To Restore the Strategic Balance"', *New York Times*, 29 May 1998, A6.

21 Quoted in Joeck (1997, 52).

22 See 'Proliferation-Related Developments: India and Pakistan', *PPNN Newsbrief*, No. 42 (Second Quarter 1998), 5. The emplacement of nuclear warheads on the *Ghauri* 'was denied the day after by Pakistan's Foreign Ministry, but US officials were quoted as saying that Pakistan is capable of putting a nuclear warhead on top of the missile' (ibid.).

that both sides agreed to continuously maintain 'capped but live capabilities of weaponizing at short notice and having the requisite delivery means, but not marrying them with warheads and deploying them in advance' (Sundarji 1994, 8; 1995, 126–27). As we have seen in Chapter 2, NWD was not as stable as Gen. Sundarji and other South Asian strategic analysts would have us believe; it was inherently fragile and could have led both countries to quickly assemble nuclear weapons in a crisis. As we have seen, both the Brasstacks (1987) and Kashmir (1990) crises could have escalated to the nuclear level. The post-tests situation was arguably even more dangerous because of the ambiguous use of the terms 'weaponization' and 'minimum nuclear deterrence' by Indian and Pakistani policy makers. Moreover, the transition to secure nuclear forces, with a second-strike capability and adequate command, control, and communications systems may be very unstable, with the risk of preemptive strikes and the possibility of misunderstanding, or misperception. In the absence of nuclear arms control, these problems could lead to nuclear war by accident or miscalculation in a future crisis or conventional conflict, considering the profound institutionalized distrust shown by both nuclear rivals and the recharged political atmosphere created by the nuclear explosions.

Can India and Pakistan achieve a relatively stable 'balance of terror' simply by following the prescriptions of deterrence theory? Does minimum nuclear deterrence solve their nuclear predicament? K. Subrahmanyam, former Director of the Institute of Defense Studies and Analyses (IDSA), and other Indian security analysts, had advocated a minimum deterrence strategy for India for many years. As Pakistan's secret nuclear weapons program developed in the early 1990s pressure grew on the Congress Party governments and their successors to declare nuclear weapon status to reestablish the military balance with Pakistan and avoid a situation of 'nuclear asymmetry'. As Pakistan moved from minimal weaponization (unassembled bombs, or level 2 opacity) to delayed weaponization (assembled bombs, or level 3 opacity),[23] the Indian leadership was under strong pressure from security think tanks such as the IDSA to do the same, on the assumption that Indian conventional military superiority would not be enough to deter a nuclear Pakistan from threatening the use of nuclear weapons in a crisis. In the words of Subrahmanyam (1981, 209), 'Nuclear weapons can be deterred only by nuclear weapons'.

In 1986 India assembled its first crude nuclear device (Frey 2006, 38); Prime Minister Rajiv Gandhi authorized 'weaponization' in 1988 and 'in 1990 a secret Indian nuclear arsenal came into existence' (Kampani 1998, 14). Pakistan is believed to have assembled its first crude nuclear device during the Brasstacks crisis, in late 1986 or early 1987 (see Chapter 2). In the late 1980s, both countries were still at level two opacity; they 'had' the bomb but they lacked a readily deployable nuclear force. Early in the 1990s, they moved close to delayed weaponization

23 On the ambiguities of 'opaque proliferation', and the four levels of 'nuclear opacity', see Chapter 2, especially Table 2, p. 24.

(level 3 opacity), arguably the most dangerous of all forms of nuclear opacity, because the country assembles nuclear warheads and keeps them separate from delivery systems, without developing a nuclear use doctrine and without facing the 'always/never dilemma' between maintaining a survivable deterrent and increasing the danger of unauthorized use (see Chapter 2 and Feaver 1993, 177).

After the nuclear tests of May 1998 both countries moved beyond covert weaponization (level 4 opacity) to a declared 'bomb in the basement', apparently superseding the ambiguities of opaque proliferation and making deterrence threats more credible by adopting an *overt* minimum nuclear deterrence posture; although as Khan (2003) notes, 'ambiguity about the state of weaponization and deployment is a *deliberate* part of the strategic doctrine of both countries (Khan 2003, 67, italics added).

Deterrence stability is presumably easier when countries adopt a minimum nuclear deterrence posture. However, once nuclear weapons are out in the open it is more difficult to get rid of them, as shown by the post-tests nuclear and missile race between India and Pakistan (see Joshi 2007). Deterrence theory claims that during the Cold War the United States and the Soviet Union did not go to war because of the specter of nuclear annihilation hanging over both countries. Before the Indian and Pakistani nuclear tests, proliferation optimists claimed that India and Pakistan would refrain from going to war because of the uncertainty created by non-weaponized deterrence and their inability to carry out a devastating first strike to eliminate the other side's nuclear arsenal (see e.g., Hagerty 1995–1996, 113–14; Sundarji 1995, 127).

According to proliferation optimists, regional nuclear rivals will refrain from carrying out *preemptive* attacks to destroy enemy nuclear forces before they can be used because nuclear weapons are easy to hide and disperse and a minor proliferator only needs a handful of survivable weapons to achieve minimum deterrence (Waltz 1995, 110). Several scholars have challenged this argument. The small size of a new nuclear arsenal does not necessarily enhance hiding. As Feaver (1997, 105) points out, 'It may be easier to hide an *entire* small arsenal than it is to hide an *entire* large arsenal. In either case, however, the number of weapons that survive through hiding, and thus the efficacy of such a strategy, is determined entirely by the availability of good hiding spots, not the size of the arsenal'. Second, some inhibitions on going to war are lifted in the context of a crisis, as shown by the Pakistani warning to the Indian ambassador in the early morning of 28 May 1998: Pakistan had 'credible information' that an attack was about to be mounted on Pakistani nuclear installations. The Indian representative was told that any attack would be met with 'swift and massive retaliation with unforeseen consequences'.[24] This was a clear threat of nuclear first use in case of an Indian preemptive conventional attack against the Kahuta uranium enrichment plant. In the same day Pakistan set off five nuclear explosions at the Chagai test

24 See 'Proliferation-Related Developments: India and Pakistan', *PPNN Newsbrief* No. 42, June 1998, 5.

site. Proliferation optimists might argue that India was deterred from carrying out the preemptive strike by the uncertainty about the location of the Pakistani nuclear weapons. Yet one may reasonably assume that Indian military planners had strong incentives in the weeks preceding the Pakistani nuclear tests to eliminate Pakistan's nuclear weapons capability before it was 'too late'.

Second, organizational imperfections may lead new nuclear nations to build inadequate forces, vulnerable to preemptive military strikes (Sagan 2003b, 64–65). During the 1971 Indo-Pakistani war both countries launched at different times preemptive attacks (unsuccessful in the case of Pakistan, successful, in the case of India) despite efforts on both sides to protect air forces from conventional attacks. Once India and Pakistan deploy nuclear weapons India might be tempted to carry out a conventional war for limited objectives that may include Indian counterforce attacks aimed at wiping out Pakistan's still incipient nuclear force (Arnett 1998, 75). Force dispersal is not a major difficulty for New Delhi considering the bigger size of the Indian arsenal (100 atomic bombs in 2007) and the vast size of Indian territory. Yet Pakistan's smaller nuclear arsenal in 1998 (15 to 20 atomic bombs) was a tempting target for an Indian preemptive strike, considering that all of Pakistan lies within easy striking range of Indian aircraft and India's Prithvi missiles. As both countries consolidated their nuclear arsenals, the danger of an Indian preemptive strike somewhat diminished. Yet in the meantime India strengthened its conventional strike capabilities and ballistic missile defenses (with Russian and Israeli help). As a result, India has become more confident that it is 'sufficiently protected from Pakistan's missiles to launch a surprise attack intended to destroy key Pakistani assets' (Khan 2003, 66). Pakistan had 60 nuclear warheads in 2007, arguably more difficult to locate for Indian intelligence agencies than Pakistan's smaller arsenal back in 1998. Yet as Khan notes, 'in a war, even a limited one, initiated by India, the Indian Air Force would attempt an initial offensive air campaign that to Pakistani leaders will appear no different than a preemptive strike'. This is a likely scenario after the 2001–2002 border confrontation; that led the Indian Army to adopt the 'Cold Start' doctrine (Ladwig 2007/08). According to this doctrine, India would be able to start a limited war with Pakistan in a future Indo-Pakistani crisis, avoiding escalation to the nuclear level. Yet several studies from the Cold War era show that India's belief in escalation control 'is fraught with danger' (Khan 2003, 66).

Proponents of minimum nuclear deterrence argue that India and Pakistan will manage to replicate the relatively stable 'balance of terror' that characterized US-Soviet relations during the Cold War. Yet unlike India and Pakistan, the United States and the Soviet Union shared no common border, let alone a disputed one, and had a considerable buffer zone between them. This gave Washington and Moscow more time for diplomatic maneuver when tensions rose than India and Pakistan have. Once it deploys nuclear weapons, Pakistan has strong incentives to adopt a launch on warning policy, because of the proximity of its major population centers and military assets to the border with India. 'Air distances from Indian bases to potential targets are so short that Pakistan may not wait to absorb an

Indian preemptive strike before acting, especially if preemption could destroy most of Pakistan's retaliatory capability' (Burns S.M. 1991).[25]

India and Pakistan have fought one another four times since independence: in 1948, 1965, 1971, and 1999, and regularly exchange fire across the Line of Control in Kashmir. How long will the restraining impact of 'existential nuclear deterrence' prevent both national leaderships from initiating a conventional war that could then escalate to the nuclear level?

Former Indian Defense Minister George Fernandes said that his country's nuclear arsenal 'would be only large enough to act as a deterrent to potential aggressors, and that India would not get drawn into the kind of nuclear arms race that led the US and the Soviet Union to amass huge nuclear stockpiles' (Burns 1998e). Four years before the nuclear tests, K. Subrahmanyam claimed that minimum deterrence would work well with two small nuclear forces (60 warheads for India, 20 warheads for Pakistan) only for the purpose of a retaliatory strike. Both countries could avoid a costly technological nuclear and missile race, and the danger of unauthorized use, if they refrained from adopting a nuclear war-fighting strategy (Subrahmanyam 1994, 188–92).

Yet even before the May 1998 nuclear tests India and Pakistan were embarked on a race for fissile-material production *and* ballistic missile development. An example was Pakistan's decision to develop the long-range *Ghauri* missile, reportedly a response to India's *Prithvi* missile. Developing nuclear-capable mobile missiles diminishes the danger of preemptive attacks, but at the cost of making unavoidable a missile race (Joeck 1997, 68–69). Because of its size and economic and technological resources, India is in a better position than Pakistan to sustain a prolonged nuclear arms race. Unless India and Pakistan sign the CTBT or a comprehensive *bilateral* test ban, they could still test more sophisticated warheads through underground nuclear explosions. Indian Prime Minister Vajpayee had promised in his speech at the UN General Assembly in September 1998 to cooperate in bringing the CTBT into force (Crossette 1998). Pakistani Prime Minister Nawaz Sharif had made a similar pledge, contingent upon the easing of US sanctions. However, India did not abide by Vajpayee's promise, alleging strong domestic political opposition to the CTBT (see Talbott 2006, 178–79). Had India signed the CTBT, Pakistan would have probably followed suit. After the US Senate refusal to ratify the CTBT on 13 October 1999, India was no longer under US pressure to sign the treaty. India had already tested a thermonuclear device on 11 May 1998, thus creating incentives for Pakistan to follow suit. At the time, despite Subrahmanyam's claim of Indian nuclear restraint, India could have been tempted to start a nuclear arms race to 'break' Pakistan through the economic stress that it would produce.

25 This is the 'disaster' considered by General Sundarji in Chapter 4 of his book. See Sundarji (1993, 50–57).

An Impossible Game: Stable Nuclear Deterrence after the Indian and Pakistani Tests

By comparison to NWD, minimum nuclear deterrence and open deployments would have the advantage of enhancing the credibility of deterrence threats and therefore would have the potential to 'stabilize' Indo-Pakistani nuclear relations; although in the absence of a formal agreement not to deploy nuclear weapons minimum nuclear deterrence may be dangerously unstable in crisis situations (Khan 2003, 71). Yet as some Indian politico-strategists recognize, the transition to stable minimum nuclear deterrence is difficult, it may take several years, and 'would introduce great instability in bilateral relations' (see e.g., Chari 2002).

There are several problems with Subrahmanyam's (1994) 'minimum deterrent' model. First, because of its strategic vulnerability, Pakistan may not forgo the production of tactical nuclear weapons that could be useful to deter an overwhelming Indian conventional attack. Second, in the South Asian context the threat to retaliate against the other side's cities may not be very credible, considering cross-border family ties and a history of refraining from attacking civilian targets in prior Indo-Pakistani wars (Giles and Doyle 1996, 142). Conveying the idea that either country would be reluctant to authorize nuclear use would undermine the credibility of deterrence threats, avowedly the main reason to test nuclear weapons and declare nuclear weapon status in the first place. Finally, minimum nuclear deterrence says little about how nuclear war may be avoided or how its consequences may be limited if war begins. To deal with these problems, India and Pakistan have adopted some measures to ensure the safety, security, and 'survivability' of their nuclear arsenals in hypothetical nuclear war scenarios; and nuclear doctrines specifying the circumstances under which they would resort to the use of nuclear weapons. Even though in practice they have nondeployed nuclear forces, India and Pakistan are far from having met the four major requirements for *stable* nuclear deterrence to exist: (1) both nuclear arsenals must be technologically reliable: fission or fusion bombs, adequately tested with proven weapon designs; (2) both states must develop secure second strike capabilities, i.e., their nuclear forces must be able to retaliate if attacked first; (3) absence of incentives to carry out preemptive military attacks designed to destroy the other side's incipient nuclear forces before they can be used in combat; (4) nuclear arsenals must not be prone to accidental or unauthorized use (Tarr 1991, 58–77; Sagan 1994, 71).

As far as the first requirement is concerned, some critics (see e.g., Gopalakrishnan 1998) have raised doubts about the claims of the nuclear scientists who conducted the Indian nuclear tests of May 1998. If the main purpose of declaring nuclear weapon status was to develop a suitable nuclear deterrent against China it was critically important for India to meet this requirement. One of the reasons India has not signed the CTBT is that it wants to leave the door open for further nuclear testing. After the publication of the National Security Advisory Board's Draft Report on Indian Nuclear Doctrine (later adopted by the Indian Government) in August 1999, there was some speculation that India might conduct further nuclear

testing (Walker 1999). As late as September 2008, after the completion of the US-India nuclear deal, there were some rumors in Washington DC that India might wait a few months and conduct a new round of nuclear tests.[26] India did not formally commit itself not to test nuclear weapons as a condition for fuel supplies under the deal with the United States.

As Lavoy (2003, 85) notes, 'Mutual deterrence might not be an automatic condition produced by each side's possession of usable and survivable nuclear weapons' [the second requirement for deterrence stability]. At the height of the Cold War, Bernard Brodie noted that 'The effective operation of deterrence over the long term requires that the other party be willing to live with our possession of the capability upon which it rests' (Brodie 1959, 397). This assumption is very problematic in South Asia. Neither India nor Pakistan seems to be willing to live with the other side's possession of the capability upon which (presumably) minimum nuclear deterrence rests; and there is some evidence that India has considered preemptive strikes against Pakistan's smaller nuclear arsenal, taking advantage of the increasing gap in military technological capabilities (e.g., early warning systems) between the two countries (Zahra 2007, 100).

Some scholars argue that minimum nuclear deterrence in South Asia is unavoidable: 'However abhorrent nuclear weapons may be, it would hardly be advisable to depend entirely on the morality of adversaries to feel secure from nuclear threats' (Basrur 2006, 48). Yet for a number of reasons the establishment of stable Sino-Indian and Indo-Pakistani minimum nuclear deterrence systems is 'an impossible game'.

The Problem of Proximity

Geographic proximity between India and Pakistan is a source of deterrence instability because it dramatically reduces warning times and creates incentives to strike first in a crisis. Once they deploy nuclear weapons both countries (especially Pakistan) will have strong incentives to adopt a 'hair-trigger' launch on warning policy, because of the proximity of their major population centers and military assets to the common border. When the maximum flight time of a ballistic missile to reach its target is five to seven minutes, 'the margin for error is razor thin, and any mistake or miscalculation could lead to catastrophe' (Ahmed and Cortright 1998a, 94). Although India could possibly adopt a more successful strategy of dispersal of nuclear weapons and delivery systems, nuclear deterrence would still be unstable because it is more difficult for Pakistan to do the same and due to command and control problems:

26 I am indebted to Daniel Markey, Senior Fellow, Council on Foreign Relations, for bringing this information to my attention during an interview conducted in Washington, DC, September 2008.

- Even if India and Pakistan do not deploy ballistic missiles, nuclear deterrence would be unstable. In a bomber-bomber system, unless the United States and China provide both regional rivals with improved ground- and air-based early warning systems they would be both (especially Pakistan) critically vulnerable to nonnuclear as well as nuclear attack.

Preemptive strikes *are* a real possibility in the absence of meaningful confidence-building measures and/or a nuclear arms control regime. Before the May 1998 nuclear tests, proliferation optimists claimed that there was no danger of preemptive strikes because India and Pakistan could disperse and/or conceal nuclear weapons and delivery systems. Yet there is a precedent of preemptive attacks (unsuccessful in the case of Pakistan, successful in the case of India) during the 1971 Indo-Pakistani war, despite efforts on both sides to protect air forces from conventional attacks (Sagan 1995, 807). Sagan argues that organizational imperfections could produce failure in the implementation of survivability measures aimed at protecting small nuclear forces from preemptive strikes. In an aircraft-aircraft system, the danger of a preemptive military attack that would disable its small nuclear forces is more acute for Pakistan because it only has a limited number of airfields that can accommodate nuclear strike-aircraft.[27] If these are disabled a strategy of dispersal and concealment of nuclear weapons would be ineffective, because it would be impossible to threaten their delivery (or deliver them) in a crisis. With its strategic depth, India would be less vulnerable to preemptive military strikes in an aircraft-aircraft system.

- Because of its strategic vulnerability, Pakistan is almost compelled to deploy its small nuclear force in ballistic missiles, to ensure its survivability, even though they are perceived by India as provocative and may fuel a ballistic missile race. India's decision to test nuclear weapons was probably triggered by Pakistan's test-flight of the 1,500 km-range Ghauri ballistic missile in April 1998.

Yet if India and Pakistan deploy ballistic missiles, nuclear deterrence will be even more unstable than in an aircraft-aircraft system. If they adopt a launch-on-warning strategy (launching of nuclear weapons as soon as an incoming attack is detected) they run the danger of inadvertent nuclear war. By deploying the Prithvi (a short-range, 150-mile ballistic missile) India has put an enormous pressure on Pakistan to adopt launch-on-warning procedures while expanding its nuclear arsenal and ballistic missile capabilities. The Indian government has announced that it has inducted the Prithvi into the army. There are said to be plans also to

27 'If a conventional war continued long enough, most of the PAF's strike force could be destroyed—even if the IAF was not intentionally targeting Pakistan's nuclear capability—a danger of which Pakistani military planners are becoming increasingly aware' (Arnett 1997, 9).

deploy Prithvi on naval vessels, including five nuclear submarines to be built with Russian assistance.[28]

The Unsolvable Command and Control Problems

Nuclear stability in South Asia after the May 1998 nuclear tests strongly depends on the establishment of reliable command, control, and communications (C3) systems. In his speech announcing Pakistan's nuclear tests Prime Minister Sharif claimed that 'effective command and control structures' had been established. Yet only on 2 February 2000 Pakistan formally created the National Command Authority (NCA) whose responsibilities include the employment and deployment aspects of the Pakistani nuclear force, and the Strategic Plans Division (SPD) that is responsible for the daily management of the Pakistani nuclear weapons complex (Luongo and Salik 2007). In India, only in January 2003 (almost five years after the nuclear tests) the Vajpayee government decided to establish a Nuclear Command Authority (NCA) while giving official status to the Nuclear Doctrine drafted by the National Security Advisory Board (NSAB) in 1999, according to which India will develop an open-ended, potentially large, triadic (land, air and sea-based) nuclear force that looks like a 'maximum', rather than a 'minimum' nuclear deterrent.

Even if India and Pakistan can discourage the other side from a preemptive military attack by dispersing their ballistic missiles, they will still face command, control and communications problems that are virtually unsolvable. Small nuclear forces face what Peter Feaver calls the 'always/never' dilemma. If political leaders adopt an *assertive* command and control system they can guarantee that nuclear weapons will 'never' be used without authorization from the political leadership, but they increase their vulnerability to an enemy first strike. If they adopt a *delegative* command system they minimize the risk of decapitation but at the cost of raising the danger of an accidental or unauthorized use (Feaver 1992/93, 163–65). If as K. Subrahmanyam, Gen. Sundarji and other Indian strategic analysts have suggested, the purpose of India's minimum deterrent is a 'no-first use' purely defensive system, the concentration of nuclear forces and an assertive command system is India's logical option, to avoid the communication problems of dispersal; although in this scenario India's small nuclear force becomes an attractive target for a preemptive strike. Pakistan, in turn, because of its strategic vulnerability and small nuclear arsenal has not reciprocated India's 'no-first use' pledge and has strong incentives to avoid the danger of decapitation by pre-delegating launch authority, thus increasing the risk of unauthorized or accidental use. As Khan (2003, 68) notes, a future conventional war with India, in the shadow of nuclear weapons, will present an 'excruciating' command and control challenge for Pakistan. If Pakistan adopts—as Khan suggests—'a policy giving local commanders the authority to launch nuclear weapons at times of extreme jeopardy to conventional forces' the

28 See *PPNN (Program for Promoting Nuclear Nonproliferation) Newsbrief* (Fourth Quarter 1998), p. 13.

danger of nuclear use in a crisis will increase, despite India's wrong belief that it can begin a conventional war and control escalation of the conflict.

Proliferation optimists claim that minimum nuclear deterrence does not require an elaborate command and control system. The small size and simple procedures associated with mini-arsenals would prevent the possibility of loss of control or unauthorized use. For example, Seng argues that 'small and simple arsenals allow for centralized communications and supervision (...) Important information and instructions can get out quickly and directly—from the war room in the capital to the bunker in the field'. Seng claims that small nuclear forces allow central leaders to maintain 'broad operational access with just a handful of domestic phone calls or transmissions', and that even if there is pre-delegation of launch authority, and more individuals have access to the nuclear button, their small number means that 'they can be carefully selected and directly instructed in tense situations' (Seng 1997, 73). Such a naive reasoning starkly shows the inconsistencies of the idea that it would be easy to establish a stable balance of terror in South Asia. Considering the dubious reliability of many Third World phone systems, it would be extremely dangerous for the Indian civilian leadership to rely on a 'simple phone call' to guarantee the centralized command and control of India's minimum nuclear deterrent. Moreover, after the nuclear tests India lacked a formal command and control authority to manage nuclear operations, or a clear decision-making chain in the event of a conflict. 'Part of the problem, the experts said, was that India's three military services [had] deep rivalries and [had] never agreed on setting up an organization like the Joint Chiefs of Staff' (Burns 1998a).

It took the United States and the Soviet Union nearly 15 years to develop reliable nuclear doctrines and secure command and control systems. Without them, there is always the danger of unauthorized nuclear use and nuclear terrorism.

The China Factor

Sino-Indian nuclear relations further complicate the prospects for establishing stable nuclear deterrence in South Asia. Ironically, India did *not* carry out a second nuclear explosion (after its first nuclear test in 1974) probably because of the China factor. Some Indian analysts then argued that given China's full-fledged nuclear weapons program a small Indian nuclear weapons capability would be more dangerous than none at all. Others argued that without nuclear weapons India would not be able to deal as a political equal with China on issues such as their border dispute (Khalilzad 1983, 186).

The Chinese and Pakistani nuclear threats were the major official explanations provided by the Indian government for the nuclear tests of 11 and 13 May 1998. If India deploys a minimum nuclear deterrent it will necessarily have to complete the development and deployment of its Agni missiles, in order to achieve threshold deterrence against China. However, such a deployment will only fuel a missile race in South Asia, without guaranteeing deterrence stability. If India agrees to forego placing nuclear weapons on missiles, however, this would create a more unstable

balance with respect to China. Missile-aircraft deterrence systems are even more unstable than aircraft-aircraft deterrence systems, because the country with a nuclear force made up of bombers becomes vulnerable to disabling preemptive strikes, and to attack against its potential missile-producing facilities (Khalilzad 1983, 194–95). Therefore, Sino-Indian nuclear relations would be unstable even if India and Pakistan agree on confidence-building measures and 'freeze' their incipient ballistic missile race; unless China also agrees to freeze ballistic missile production and not to deploy ballistic missiles against India. Unfortunately, steps to prevent a nuclear arms race in South Asia will make it harder for India to achieve a stable minimum deterrent against China, but Indian efforts to match China would be extremely provocative to Pakistan.

How would India and Pakistan protect their ballistic missiles? Proliferation optimists claim that small nuclear forces deliverable by ballistic missiles are easy to conceal especially if they are located in mobile facilities. Proliferation optimism's claim that new nuclear states can very easily have second strike capability seems plausible only if they have ballistic missiles as means of delivery. In an aircraft-aircraft deterrence system, as Bowen and Wolven (1999) point out, while dispersal may be a method of protecting nuclear assets, if the airbases that hold those dispersed assets are destroyed, the practical benefit of having surviving airplanes without airbases from which to launch a retaliatory attack is close to zero. If India and Pakistan adopt a strategy of dispersal of their ballistic missiles, mobility, and some kind of predelegation, they will have some sort of 'second strike capability' but at the risk of unauthorized use and crisis instability. Such a capability would not guarantee stability in times of crisis because 'if it is perceived that the weapons are not under tight, assertive control, precipitous action could be taken if tensions mounted and if either side thought nuclear war was possible or imminent' (Bowen and Wolven 1999, 25). Moreover, roads and railways in South Asia are relatively poor with heavily congested and often undisciplined traffic. As Khan (2003, 70) notes, 'Moving liquid–based missile components would be hazardous and prone to accidents. Even solid-motor casts are vulnerable to damage as the result of poor road conditions; cracks can lead to catastrophic failures. These factors limit the utility of road-mobile missiles in South Asia'. Pakistan's ability to prevent an Indian preemptive strike by deploying mobile ballistic missiles is further limited by the fact that even if it deploys rail-mobile missiles they would be 'perilously close and almost parallel to the border with India' (Khan 2003, 70). By contrast, rail-mobile systems may work for India.

Crisis Stability and the Dangers of Misperception

Crisis stability depends to a significant extent on psychological factors, particularly on both sides' perception of how tightly controlled the enemy's forces are. Once a crisis begins the line between 'rational' and 'irrational' behavior gets blurred. Proliferation optimists and some Indian military strategists wrongly believe that in a situation of low-level nuclear symmetry [presumably the Indo-Pakistani

situation] the danger of a nuclear holocaust does not exist (see e.g., Lavoy 1995, 735–45). Imagine that Pakistan uses tactical nuclear weapons first assuming that there is only a minor risk of nuclear retaliation, based on the 'rational', cost-benefit calculation that India will *not* retaliate, because the Indian leadership fully controls the Indian arsenal and will conservatively decide that war termination is better than a regional holocaust. If India *does* retaliate because it has predelegated launch authority, anger will probably produce escalation, more hundreds of thousands of casualties, more anger, and more *irrational* retaliatory strikes, the very situation that minimum nuclear deterrence was supposed to prevent. Although there is no obligation to retaliate if one suffers a nuclear first strike, even the most assertive, centrally controlled nuclear arsenal could give the order to do so, following employment plans that would become self-fulfilling prophecies.

The instability of a missile-aircraft deterrence system is compounded by the short distances between potential targets in South Asia which dramatically diminish reaction times in a crisis. Ballistic missiles are destabilizing without adequate early warning systems, satellites, etc. These are very expensive systems that neither India nor Pakistan can afford without external (e.g. US) help. Yet the possibility of nuclear assistance from the United States is unlikely, because it would not risk compromising its own security by sharing sensitive technology (see Miller 1993).

Conclusion: Indo-Pakistani Nuclear Relations after the May 1998 Nuclear Tests

The Indian and Pakistani nuclear tests show that despite the end of the Cold War, globalization, and the progress made toward the marginalization of nuclear weapons in international politics in the first half of the 1990s (Walker 2000, 710–12) security and other incentives to 'go nuclear' are still powerful in some regions.

The May 1998 test explosions in South Asia represented a serious set back for international efforts to prevent the spread of nuclear weapons and showed the bankruptcy of the US policy of 'capping' both countries' nuclear weapons programs.[29] As Graham (1998, 5), puts it, 'the United States cannot insist that India and Pakistan do something that it is not prepared itself to do'. Instead of seeking to 'manage' the 'new realities' in South Asia (e.g., by providing nuclear assistance to both nuclear rivals) the United States should take more seriously Indian demands for global denuclearization within a reasonable time frame (see Chapter 5). The late Rajiv Gandhi had a plan for the progressive elimination of nuclear weapons

29 'The head of Pakistan's Kahuta research laboratory, Abdul Qadeer Khan, reportedly told a Saudi newspaper that his country had never capped its nuclear programme as it had promised the US it would do'. 'Proliferation-Related Developments: India and Pakistan', *PPNN Newsbrief*, No. 42 (Second Quarter), 4.

worldwide that was not seriously considered by the established nuclear powers.[30] Instead, they managed to have the Non-Proliferation Treaty (NPT) indefinitely extended in 1995, thus legitimizing forever the distinction between 'nuclear haves' and 'nuclear have-nots'.

The nuclear tests allowed India to start the process of requesting admission to the 'nuclear club' that was finally granted by the Bush administration with the US-India nuclear deal—announced in July 2005 and completed in October 2008—and the acquiescence of the Nuclear Suppliers Group in September 2008 to relax its proliferation rules to make India eligible for exports of nuclear technology despite its nuclear weapons program. Yet by testing nuclear weapons India crossed a political threshold rather than a military threshold, because as Basrur points out, 'the bomb had been developed much before 1998, apparently at the turn of the previous decade' (Basrur 2003, 71).[31] The Indian strategic elite conceived nuclear weapons more as symbols of international status than as military instruments of war. There had always been a tension between India's traditional anti-nuclear diplomacy (that goes back to the Nehru era, 1947–1964) and its global power status pretensions. This tension has now been resolved in favor of significant progress toward achieving (with US help) global power status. By going nuclear, India has opted for becoming part of the existing International Nuclear Order (INO) rather than changing it.

At first sight, India's decision to test nuclear weapons in May 1998 is something like a puzzle. Historically, the Chinese and Pakistani threats had been the two major security rationales for India to keep the nuclear weapons option open. Yet before the May 1998 nuclear tests there was no increased 'China threat' that could explain India's overt nuclearization; and in 1997 India and Pakistan had held talks at the Foreign Ministry level in order to settle the Kashmir dispute. Kanti Bajpai has characterized India's foreign policy as 'modified structuralism': 'In the modified structuralist view, decision makers operate in a world of sovereign states seeking to maximize their interests and power' (Bajpai 1998, 157). India's modified structuralism is really an offensive realist posture. According to offensive realism, 'all great powers are revisionist and primed for offense' (Mearsheimer 2001, 3). India's painstaking search for recognition as a 'great state' due to the 'historical and civilizational accomplishments of the Indian people' (see Cohen 2000, 17–18) and its constant denunciation of the International Nuclear Order (INO) as institutionalizing 'nuclear apartheid' help to explain the Indian tests of 11 and 13 May 1998. India's self-perception as a dissatisfied power in the global system of states led it to keep the nuclear weapon option open without weaponization. If the Chinese nuclear tests of 1964 created an imminent security threat, why

30 On the Gandhi plan, see Sundeep Waslaker, 'Abolishing Nuclear Weapons: Rajiv Gandhi Plan Revisited', Occasional Paper, ACDIS, University of Illinois at Urbana-Champaign, July 1994.

31 According to Frey (2006, 38) 'In 1986, India was considered to have passed the nuclear Rubicon by assembling its first crude nuclear device'.

did India wait for 34 years to declare nuclear weapon status? The reason is that nuclear weapons were not perceived as 'usable instruments of national power or even as the primary components of national security' (Basrur 2003, 66). Instead, the 'nuclear weapon option' was perceived as a bargaining chip to achieve great power status and reaffirm India's self-esteem while becoming independent from the United States and other great powers. In order to be recognized by the United States as a great power which (unlike Pakistan) has the 'right' to belong to the exclusive 'nuclear club', India was prepared to pay the price of provoking Pakistan to test nuclear weapons, knowing that the equalizing effects of the bomb would deprive it of its conventional military superiority in the fight over Kashmir. In the eyes of the Indian strategic elite, Pakistan did not deserve admission to the nuclear club because its 'imported' nuclear program gave it an inferior status. In this curious Indian construction of the identities of the Indian and Pakistani nuclear arsenals, Pakistan was assigned the low status of a 'nuclear have-not' even though it possessed nuclear weapons![32] From a constructivist perspective, one may argue that 'the discourse on nuclear weapons in India carved out a national identity that was not overly influenced by the projection of external threats; rather it was formed by portraying the nuclear build up in the context of a global competition, one defined by the socially constructed values that determine prestige and status' (Frey 2006, 192). India's strategic elite did not perceive the INO in the context of Indian security. Had it done so, it would have recognized that India would have been better off by joining the CTBT—it had advocated this treaty since 1954!—thus forcing Pakistan to sign it and preventing it from testing nuclear weapons. Instead, India's strategic elite's perception of the International Nuclear Order (INO) was that it 'provided superior status to the established five powers' (Frey 2006, 197). Most non-nuclear NPT parties perceived the NPT and the non-proliferation regime as guarantors of their security. Instead, India's strategic elite focused only on the unfair aspects of the regime (the distinction between nuclear haves and nuclear have nots, with different rights and obligations). Yet as Perkovich (1999, 449) argues, 'Indian security pundits and the strategic enclave called for disarmament knowing that the nuclear weapon states would not oblige, thereby giving normative cover for India to pursue nuclear weapons'. This helps explain the fact that Indian Prime Minister Rajiv Gandhi would present a detailed Plan of Action for global nuclear disarmament at the UN General Assembly in the Fall 1988 while secretly authorizing weaponization (a secret Indian nuclear arsenal came into existence in 1990, see Kampani 1998, 14). If the bomb had already been developed since 1990, the only possible explanation for the 'long wait' until 1998 to declare nuclear weapon status is India's complicated relationship with the United States and the fact that the real goal of the Indian strategic elite was to join the 'nuclear club'. After the tests, 'status-seeking, the main national interest guiding India's nuclear build-up before the tests, transformed into an effort to

32 See Frey 2006, 198; Figure 10.1, 'Nuclear Status Distribution in the Perception of India's Strategic Elite'.

consolidate India's increased status' (Frey 2006, 209). Arguably, the US-India nuclear deal of 2006–2008 accomplished that goal (see Chapter 5).

Pakistan's motivations to go overtly nuclear in May 1998 are more straightforward than India's. Once India tested nuclear weapons on 11 and 13 May 1998, Pakistani Prime Minister Nawaz Sharif had no option but to follow suit, for domestic political reasons. The Clinton administration put some diplomatic pressure on the Sharif government to prevent the Pakistani nuclear tests on 28 and 30 May 1998. Whether it offered Pakistan enough incentives to change course is an open question. Apparently Pakistan argued that 'if the United States would just commit itself to mediating in the Kashmir dispute, the nuclear issue could, over time, be resolved "bilaterally"—that is, between India and Pakistan directly' (Shamshad Ahmad, quoted in Talbott 2006, 65). US offers of relief of the sanctions imposed under the Pressler Amendment (because since 1990 the US government had been unable to certify that Pakistan did not possess a nuclear device) were not enough and the Clinton administration was not prepared to commit itself to mediating in the Kashmir dispute. Some scholars argue that Pakistan would have tested nuclear weapons anyway, due to its 'obsession' with India, and its determination to acquire an equalizer to Indian power (Perkovich 2008, 63).

The Causalities Behind the Indo-Pakistani Nuclear Rivalry

Did Pakistan go nuclear as a reaction to India's nuclear build-up, India's nuclear test of 1974, and its policy of keeping the nuclear weapon option open? Alternatively, was Pakistan's decision to go nuclear only triggered by its defeat in the December 1971 war that resulted in Pakistan's break up and the creation of Bangladesh? Conversely, can one argue that India had no choice but to go nuclear in response to Pakistan's proliferation decision? (As K. Subrahmanyam puts it, 'only nuclear weapons can deter nuclear weapons'.)

There are two schools of thought on the causality behind the South Asian nuclear rivalry. The dominant interpretation among the members of the Indian strategic elite and South Asia experts in the United States is that Pakistan made the decision to 'get the bomb' after the Bangladesh war of 1971. Pakistan had to see its area reduced to one-tenth the size of India, over half its population splitting off to form the new state of Bangladesh and over one-third of its army taken prisoner by India to make the decision to 'go nuclear' at a meeting between Prime Minister Zulfikar Ali Bhutto and a number of nuclear scientists in the city of Multan in January 1972.

An alternative interpretation is that Pakistan reacted not to its defeat in the 1971 war, but to India's first nuclear test of 1974, that was characterized by Zulfikar Ali Bhutto as a 'fateful development' that had changed the strategic equation between India and Pakistan. On the other hand, the Indian strategic elite argues that India 'had no choice' but to react to Pakistan's proliferation decision [in the second half of the 1970s and the first half of the 1980s] and build-up a nuclear arsenal to protect its security interests' (Frey 2006, 81). Yet one may argue that (a) in

the absence of India's nuclear build-up (epitomized by the 1974 nuclear test) Pakistan's acquisition of the bomb was not a foregone conclusion. It would have probably not reacted with its own nuclear build-up and India could have preserved its post-1971 overwhelming conventional military superiority and (b) 'it is hard to imagine that an economically dependent Pakistan would have been able to resist international pressures against building the bomb it India had joined the NPT and abstained itself' (Frey 2006, 81). In any case, after May 1998, there was a dramatic change in the military-strategic balance between India and Pakistan once the latter was able to deter Indian conventional attacks across the Line of Control (LOC) in Kashmir by threatening the use of tactical nuclear weapons. From this perspective, the Indian nuclear tests were a 'strategic misstep' (Cohen 1998; Sidhu 2003).

The Indian and Pakistani nuclear tests of May 1998 uncovered a dormant crisis of the NPT-based International Nuclear Order (INO), showing the need to revive and reinforce the NPT by effectively linking nuclear non-proliferation and global nuclear disarmament. The lack of progress toward global nuclear disarmament within a certain time frame was an important element of India's strategic discourse over the years—first, to justify the policy of keeping the nuclear weapons option open' and then to explain the decision to join the 'nuclear club'. India could not continue waiting for global nuclear disarmament while facing a 'dramatically worsened' strategic position after 1990 with the end of the Cold War (see Cohen 2000, 20). As Thakur notes, 'The NPT-N5 (the five nuclear powers recognized as such by the NPT) preach nuclear abstinence but do not practice it … Not a single country that had nuclear weapons when the NPT was signed in 1968 has given them up' (Thakur 2006, 11).

The shock caused by the Indian and Pakistani nuclear tests created a unique opportunity to take the big step of transforming the NPT into a treaty for the eventual elimination of nuclear weapons worldwide. Otherwise, nuclear weapons might well become a legitimate currency of power in the twenty-first century and could even be used not just for deterrence purposes or as a last resort to avoid annihilation (Israel's and Pakistan's rationales for 'going nuclear') but as 'real' weapons in the tactical battlefield, not only in South Asia, but also in other hot spots in the Third World, such as the Middle East or the Korean Peninsula. The danger of nuclear terrorism is an additional reason to take bold steps toward global nuclear disarmament. Unfortunately, the Clinton administration's decision to keep the US nuclear arsenal indefinitely (see Schell 2000, 31) and the Bush administration's renouncement of the 'Thirteen Practical Steps' toward nuclear disarmament adopted at the 2000 NPT Review Conference have reversed the progress toward nuclear arms control and the marginalization of nuclear weapons achieved in the first half of the 1990s. It is time for the United States and the other declared nuclear-weapon states to reconsider their ambiguous stance toward nuclear disarmament; pushing for ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT) in the US Senate and announcing eight-party negotiations to dismantle existing nuclear arsenals. Besides the five declared nuclear weapon states, India, Pakistan, and Israel should be part of the negotiations. Coupled with a global fissile material

cutoff treaty, global negotiations to achieve nuclear disarmament early in the twenty-first century would radically change the incrementalist non-proliferation strategy pursued by the 'big five' since the indefinite extension of the NPT in 1995 (Simpson 1995).

After the May 1998 nuclear tests, in a very short period of time, the Indian strategic elite went from strong opposition to the unfair international nuclear order led by the United States to a strong desire to engage in negotiations with the United States for India's possible adherence to it. Like the other members of the nuclear club, India would now accept the premises of rational deterrence theory, and improve its security by adopting a minimum nuclear deterrence doctrine; recognizing that 'nuclear weapons are no more than a necessary evil' (Basrur 2006, 182). From this perspective, it would be better if nuclear weapons did not exist at all, but they do, and India and the other members of the international community cannot wish them away. According to Basrur (2006, 178), 'the only way to minimize the danger [nuclear weapons] pose to civilization is to agree to marginalize them. Negotiated strategic stability offers the only course of action that approaches a solution. The basis for stability lies in privileging the political over the military character of these weapons'. Yet as we will see in the next chapter, the adoption of a minimum nuclear deterrence doctrine did not prevent India and Pakistan from approaching the brink of a nuclear exchange in the two post-tests crises: the Kargil War and the 2001–2002 border confrontation.

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Chapter 4
India-Pakistan Crises after the Nuclear Tests: The Kargil War (1999) and the 2001–2002 Border Confrontation[1]

> 'No,' she told him, 'we don't want nuclear weapons. They only bring danger where there was none before'. (Indian Prime Minister Indira Gandhi, interviewed by Rodney Jones, quoted in Perkovich (1999, 178)

Introduction

This chapter examines two Indo-Pakistani crises with nuclear overtones: the Kargil war (May–July 1999) and the 'Twin Peaks' crisis of December 2001–October 2002, when India and Pakistan kept approximately eight hundred thousand soldiers in a high state of readiness along the international border and the Line of Control (LOC) dividing Kashmir, raising the specter of a conventional war that could escalate to the nuclear level.

The two post-tests nuclear crises have revived the debate among nonproliferation scholars and South Asia specialists on the consequences of nuclear proliferation in South Asia. As Busch (2004, 174) notes, India and Pakistan are 'critical cases' for the broader—and still undecided—debate among proliferation 'optimists' and proliferation 'pessimists'.

Proliferation optimists claim that the spread of nuclear weapons has a positive impact on international and regional stability, because 'the chief impact of nuclear weapons is to deter war between their possessors' (Hagerty 1995–1996, 114). They base their analysis on Waltz's famous monograph, *The Spread of Nuclear Weapons: More May Be Better* (1981). Proliferation optimism is not a new idea. It goes back to the work of Jacob Viner (1946), Arthur Lee Burns (1957), French General Pierre Gallois (1961) and Robert Sandoval's (1976) 'porcupine theory' of nuclear proliferation.[2] Hagerty (1995–1996, 84) applies Waltz's framework to the

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1 Portions of this chapter are drawn from Mario E. Carranza, 'Avoiding a Nuclear Catastrophe: Arms Control after the 2002 India-Pakistan Crisis', *International Politics*, Vol. 40, No. 3 (Fall 2003), pp. 313–339. Reproduced with permission of Palgrave Macmillan.

2 Brodie (1946) inspired the first generation of proliferation optimists. See Lavoy (1995, 700–702).

India-Pakistan nuclear arms competition, arguing that in South Asia, the 'logic of nuclear deterrence is more robust than the logic of nonproliferation'. According to Hagerty, the mere existence of nuclear weapon capabilities in South Asia deters India and Pakistan from conventional or nuclear war.

By contrast, proliferation pessimists argue that nuclear proliferation is bad, because it produces international and regional instability. In the 1960s, the leading advocates of the NPT, inside and outside the US government, were 'absolute pessimists' (Lavoy 1995–1996, 708–709). For proliferation pessimists, the logic of nonproliferation is better than the logic of nuclear deterrence because the latter *can* fail, and nuclear proliferation *could* lead to nuclear war, with catastrophic results. A local war involving nuclear weapons in the Middle East, South Asia, or the Korean peninsula, 'would have severe political and psychological repercussions throughout the world' (Iklé 1996, 122). Pessimists have argued that even if new nuclear weapon states want to manage their arsenals cautiously, it will be very difficult for them to build effective command and control systems and they will face insurmountable technological and organizational obstacles to achieve deterrence stability, increasing the danger of nuclear use by accident, miscalculation, or a nuclear coup d'etat. Sagan has shown that 'the actual behavior of new proliferators will be strongly influenced by the powerful military organizations within those states and that the common biases, rigid routines, and parochial interests of these military organizations will lead to deterrence failures and uses of nuclear weapons despite national interests to the contrary' (Sagan 1994, 102).

Several studies have concluded that the rational deterrence theory of optimists is more supported by the historical record than the pessimists' decision-making and organizational approach. Optimists point to the 'peaceful' resolution of regional crises (such as several Indo-Pakistani crises) without full-scale war as proof that pessimism has 'failed' under 'favorable' circumstances. Everyday that goes by without a deterrence failure seems to confirm proliferation optimism. However, as Knopf (2002, 43) notes, 'the way the debate is presently framed [as a theory contest] makes the pessimist case appear weaker than it actually is'. According to a variety of sources, during the 2001–2002 India-Pakistan crisis the South Asian rivals deployed ballistic missiles armed with nuclear warheads along the border, increasing the danger of accidental, unauthorized, or inadvertent use of nuclear weapons, as well as the risk of nuclear use by miscalculation. During the crisis both countries played a dangerous game of nuclear brinkmanship (see Hoodbhoy 2002) confirming pessimist fears that there is a real danger of nuclear war in South Asia. The theory that nuclear weapon states do not fight wars with one another is simply not true considering that India and Pakistan fought the Kargil war in May-July 1999 suffering more than 1,000 casualties each. Moreover, the nuclear peace hypothesis is probabilistic, not ironclad: 'there may simply not have been enough interactions between nuclear-armed states to produce a deterrence failure' (Knopf 2002, 54). Betts (2000, 65–66) and Feaver (1993, 162) have forcefully made the same point, namely, that even if deterrence theory can predict a 'nuclear peace' 99.5 percent of the time, given the stakes involved, even a 0.5 percent possibility

of deterrence failure is not trivial: 'The ramifications of the first breakage of the half-century taboo on nuclear use are too unpredictable to tempt us to run the experiment' (Betts 2000, 65–66). Arguably, proliferation pessimism is incomplete without a case for the need of nuclear disarmament. Far from being utopian, the case for nuclear disarmament is compelling even from a purely rational choice perspective; especially in the post-9/11 era that has added urgency to the need for a Fissile Material Cutoff Treaty (FMCT) to diminish the possibility of catastrophic nuclear terrorism.

South Asia specialists and nonproliferation experts are deeply divided regarding the impact of India's and Pakistan's open nuclearization on structural and crisis stability. Proliferation optimists argue that nuclear deterrence is robust, and that the absence of war during the 2001–2002 border confrontation between India and Pakistan proves that nuclear deterrence is at work in South Asia, despite the differences with the historical US-Soviet model of nuclear deterrence during the Cold War (see Chapter 3). Proliferation pessimists argue that Indo-Pakistani nuclear relations are inherently unstable and that the absence of war during the 2002 standoff does not guarantee that a future crisis will not escalate to a nuclear confrontation.

This chapter explores the lessons of the two post-tests Indo-Pakistani crises with nuclear overtones: What did both countries learn from the Kargil war and the 2001–2002 crisis? Did they believe that their attempts at nuclear coercion worked? Did they believe that deterrence was successful? Did they do a rethink on the utility of nuclear weapons for settling their bilateral disputes? Did either country understand the limits of the international (US) pressures that would be put on them in future crises? What are the prospects for stabilizing Indo-Pakistani nuclear relations after the 2001–2002 border confrontation?

The Stability/Instability Paradox and the Proliferation Optimism-Pessimism Debate

Both proliferation optimists and proliferation pessimists use the so-called stability/instability paradox to make their case for the stabilizing (proliferation optimism) or de-stabilizing (proliferation pessimism) effects of nuclear proliferation. Snyder (1961, 198–99) argued that 'the greater the stability of the "strategic" balance of terror, the lower the stability of the overall balance at its lower levels of violence'. As Jervis (1989) puts it, 'to the extent that the military balance is stable at the level of all-out nuclear war, it will become less stable at lower levels of violence'. Ganguly and Hagerty (2005, 159) invoke the stability/instability paradox to make the case for proliferation optimism: 'The Pakistani behavior in precipitating [the Kargil conflict] conformed closely to the expectations of the "stability-instability paradox." This proposition holds that nuclear weapons do contribute to stability at one level for fear of nuclear escalation. Simultaneously, they also create incentives for conventional conflicts in peripheral areas as long as either side does not breach

certain shared thresholds'. On the other hand, Feroz Hassan Khan, a proliferation pessimist, emphasizes the 'instability' side of the paradox:

> In brief, the paradox states that rather than bring stability to a pair of potential adversaries, nuclear weapons may create instability by encouraging one or both sides to engage in 'limited' military adventures against the other, as long as they do not put at risk the vital interests of the target country. Much to the dismay of 'deterrence optimists'—who might contend that the mere prospect of nuclear war is enough to deter any sort of hostilities—both India and Pakistan have boldly attempted to test the threshold of nuclear escalation (Khan 2003, 64).

Still other scholars use the stability/instability paradox as synonymous of nuclear deterrence: 'The stability-instability paradox "works" only until it fails. And one failure could be catastrophic' (Krepon 2006, 9). On the other hand, taking distance from both proliferation optimism and proliferation pessimism (although leaning toward the latter) Paul S. Kapur has provocatively argued that contrary to Cold War stability/instability logic, in South Asia, '*instability* in the nuclear realm encourages instability at lower levels of conflict' (Kapur 2005, 129). According to Kapur, 'the stability-instability paradox does not explain continuing conflict in a nuclearized South Asia' (Kapur 2005, 129). Knopf (2002, 52) claims that the 2001–2002 border confrontation confirms 'the continued relevance of Glenn Snyder's "stability-instability paradox"'. Krepon (2006, 10) claims that 'The relevance of the stability-instability paradox in South Asia is no longer disputed by Indian and Pakistani strategic analysts'.

The overuse of the stability/instability paradox in the post-test literature on the Indo-Pakistani nuclear competition has converted the concept in an oxymoron; it means different things to different scholars who tend to freely paraphrase Snyder's original formulation. Kapur (2005, 2008) has persuasively shown that the concept cannot be easily extrapolated from the US-Soviet nuclear competition to the post-tests nuclearization of South Asia. Even if one admits the proliferation optimistic premise that 'a serious competition between states that possess nuclear weapons reinforces the caution of national leaders to avoid a full-scale conventional or nuclear war, while increasing the instances of risk-taking below these thresholds' (Krepon 2006, 10) one still has to distinguish between 'sub-conventional' and 'limited' war. Moreover, the post-tests nuclear crises in South Asia generated a dynamic of their own, leading both India and Pakistan to redefine their nuclear doctrines. India developed the 'Cold Start' military doctrine after the 2001–2002 border confrontation, hoping that it will be able to control escalation in a 'limited war' avoiding taking it to the point of setting off a Pakistani nuclear response.

If one defines strategic stability as 'a low likelihood that conventional conflict between nuclear powers will escalate to the nuclear level' (Kapur 2007, 33) the empirical evidence available from the two post-tests Indo-Pakistani crises shows that the nuclearization of the subcontinent did *not* bring about strategic stability to Indo-Pakistani nuclear relations. During both crises India refrained from launching

large-scale conventional attacks on Pakistan. According to proliferation optimists (see e.g., Ganguly and Hagerty 2005, 170) such restrained behavior was mainly due to the fear of escalation to the nuclear level. However, the erosion of the nuclear taboo during both crises suggests that had a large-scale conventional war broken out there would have been a *real* danger of escalation to the nuclear level. Moreover, contrary to what proliferation optimists would have us believe, the best available evidence shows that India's 'restrained' behavior during both crises (in the sense that it refrained from crossing the Line of Control in Kashmir) 'was not driven primarily by a fear of Pakistani nuclear weapons. V.P. Malik, Indian Army chief of staff during the Kargil operation, explains that the Indians avoided crossing the Line of Control mainly out of concern for world opinion ….. Despite these concerns, Indian leaders would probably have allowed the military to cross the Line of Control if doing so had proved necessary [to eject the Pakistani intruders]' (Kapur 2008, 77–78). That the possibility of nuclear use in a widened conflict was not a major psychological obstacle for Indian decision makers is shown by the fact that several of them are on record during the 2001–2002 standoff declaring that if India chose to launch a large-scale conventional attack, Pakistan would be deterred from using nuclear weapons first knowing that India would reply with a massive retaliatory strike that would threaten Pakistan's survival as a nation. The erosion of the nuclear taboo during both crises clearly appears in Indian decision makers' and strategic analysts' statements that in a hypothetical nuclear exchange India would manage to survive due to its large size and territory, whereas Pakistan would be completely obliterated. The erosion of the nuclear taboo also appears in General Musharraf's statement on 5 June 2002 that 'the possession of nuclear weapons by any state obviously implies that they will be used under some circumstances' (Stolar 2008, 25).

The Kargil War (May–June 1999)

India and Pakistan have fought two all-out wars over Kashmir (1947–1948 and 1965) since becoming independent in 1947. Both countries claim sovereignty over this territory, whose population is predominantly Muslim. Pakistan questions the legality of the accession of Kashmir to India after the partition of the subcontinent in 1947, accusing India of not implementing a UN Security Council Resolution calling for a plebiscite to determine the wishes of the Kashmiris. As Kashmiri writer-activist Prem Nath Bazaz notes, the Kashmir dispute 'is "primarily ….an ideological war," in which the elites of both countries have perceived foundational, nonnegotiable principles of statehood to be at stake' (Bose 2003, 9).[3] After the outbreak of a full-fledged insurrection in the Kashmir Valley (controlled by India) in late 1989, Pakistan has intensified its support and training for Kashmiri insurgents;

3 The literature on the Kashmir dispute is quite extensive. See e.g., Thomas (1992); Cohen (1995); Ganguly (1997); Bose (2003); Wirsing (2003).

and since then there has been a low intensity conflict going on between India and Pakistan. After the 11 September 2001 terrorist attacks against the United States and the US-India rapprochement, the Indian government has conflated the Kashmir dispute with the US-led 'war on terror', accusing Pakistan of actively supporting 'cross-border terrorism'. To some extent, India has managed to convince the United States that Kashmir is a terrorism problem, rather than a territorial dispute or a self-determination issue. After the May 1998 nuclear tests, Kashmir has often been described in the United States as a 'nuclear flashpoint' and before his March 2000 visit to South Asia, US President Clinton referred to Kashmir as 'the most dangerous place on earth'.

The Kargil war (May-July 1999) was the first major Indo-Pakistani armed conflict in an environment of declared nuclear weapons status, and a test of the hypothesis that the May 1998 nuclear tests favour Pakistan, because nuclear weapons are the 'great equalizer' in international relations. The conflict began when Muslim militants, with Pakistani support, took over snowy peaks on India's side of the Line of Control in May 1999. India described the intruders as infiltrators supported by Pakistan. For two months India and Pakistan were engaged in heavy fighting in Kargil, shelling each other with huge artillery guns across the line of control that separates their zones in Kashmir. India finally recovered the snowy peaks but at the cost of hundreds of casualties, and only after the Sharif government (under US pressure) agreed to withdraw Pakistani troops.

The Kargil war significantly changed Indo-Pakistani strategic interactions and their mutual calculus of deterrence. Pakistan took advantage of its declared nuclear weapons status to gamble that it could militarily support the Muslim militants' insurgency in the Kargil peaks without an Indian response. However, Pakistan overestimated the deterrent effect of its nuclear might; India was not deterred from launching a successful counteroffensive on its side of the LOC by the possibility of a Pakistani first use of nuclear weapons; and won the Kargil war both at the military and diplomatic fronts. India could have won the war much faster and less bloodily by attacking the intruders' supply lines in Pakistan-controlled Kashmir. Yet India was deterred from using this method, and from expanding the war into Pakistani territory, for two reasons: (1) fear of provoking a wider war that could escalate to the nuclear level, and (2) fear of destroying the good will of foreign powers, such as the United States and China, traditionally an ally of Pakistan (Jasjit Singh 1999; Thomas 2000, 89).

Are nuclear weapons falsely reassuring? If so, they increase the danger of conventional conflict in a Kargil-like situation. At the height of the crisis, 'hawk' Indian strategists argued that nuclear weapons now allowed India to 'teach Pakistan a lesson', hitting back into Pakistani territory itself. Had Indian hawks prevailed, the Kargil war could have escalated to an all-out conventional war, with the potential to escalate to the nuclear level once Indian troops penetrated Pakistani territory. According to Bruce Riedel, special assistant to President Clinton, Pakistan was actually preparing to use its nuclear missiles during the Kargil war, when India threatened to broaden the theater of the conflict (see Riedel, 2002).

Pakistan's overt nuclear weapons capability—rather than the stability/instability paradox—helps explain Pakistan's decision to start the Kargil conflict. Now that it possessed the bomb, Pakistan 'was able to challenge territorial boundaries in Kashmir without fearing catastrophic Indian retaliation' (Kapur 2008, 74). This is a deterrence optimism argument: Pakistan could assume that India would *not* retaliate (using its conventional military superiority) to its extensive support for the Kashmiri insurgency for fear of a Pakistani nuclear first strike. India had overtly gone nuclear in May 1998 because only nuclear weapons can deter nuclear weapons but now that both countries got the bomb India could no longer use its conventional military superiority against Pakistan; Pakistan's nuclear arsenal effectively deterred India from taking advantage of its conventional military superiority to punish Pakistan for its challenge to the military status-quo in Kashmir.

Yet the outcome of the Kargil war shows that the argument that nuclear weapons are the 'great equalizer' in international relations cuts both ways. Before Kargil, some Indian analysts argued that the nuclear tests favored India, since New Delhi could now 'decide to attack [Muslim militants'] training camps and bases in Pakistani-occupied Kashmir gambling that Pakistan would limit any war to conventional weapons' (Ayoob 1998).[4] What if Pakistan does not react that way and uses tactical nuclear weapons to stop an Indian counter-offensive on its own territory? Pakistani military strategists have strong incentives to do so at an early stage of a war with India, because in most war scenarios time is not in their favor. As a conventional war unfolds, the decision to use nuclear weapons becomes more difficult, even if they are brandished as a 'weapon of last resort'. On the other hand, if Pakistan uses nuclear weapons in desperation, would India retaliate? According to India's draft nuclear doctrine—announced in August 1999 after the Kargil war—India would *automatically* retaliate, imposing an 'unacceptable' level of punishment and destruction on Pakistan after absorbing a nuclear first strike (Jasjit Singh 2001). As P.R. Chari notes, 'The conclusion that India would launch a devastating riposte to obliterate Pakistan should Pakistan launch a nuclear attack, irrespective of the ravages India might suffer, suggests a certain irrationality afflicting sectors of the Indian military, i.e., it would derive satisfaction from completely destroying Pakistan irrespective of the consequences for India. Conveying a threat of this nature without wishing to implement it is obviously irrational' (Chari 2002, 264). Could nuclear war be terminated at a 'low' level of casualties (say, 500,000 to 1 million)? Indian and Pakistani military planners are well aware of this scenario, which has become poignantly relevant, because India has announced a 'limited war' doctrine, while hardening its stance on Kashmir after President Clinton's visit in March 2000 and the American 'tilt' toward India.

Limited war is the Indian government's answer to its post-Kargil predicament: Pakistan's ability to cross the Line of Control (LOC) threatening nuclear use to

4 See Chapter 3, p. 56.

deter India from launching a conventional counteroffensive into Pakistani territory. After Kargil, the Indian government seems undeterred by Pakistan's nuclear weapons and is determined to prevent a second Kargil by threatening to cross the LOC in such scenario. It would be extremely difficult to keep such a 'limited war' limited, because the choice of doing so would not entirely be in India's hands (Raghavan 2000; 2003; Nayar 2000). After the Kargil war, both India's readiness to cross the LOC 'no matter what' and Pakistan's veiled threat of nuclear use increase the danger of catastrophic escalation to the nuclear level in future crises.[5] After the war, important members of India's strategic elite considered inevitable a limited conventional conflict with Pakistan to meet the challenge of infiltration of Kashmiri insurgents and foreign fighters interested in supporting Kashmir separatism (officially described as 'cross-border terrorism') and there was no guarantee that India's 'limited war' doctrine would deter Pakistan from a second Kargil, which was always a possibility as long as the Kashmir conflict remained unsolved.

During the Kargil war the Clinton administration sided with India, accepting its claim that Pakistan was committing aggression against India and strongly supporting India's demand for an immediate withdrawal of all Pakistani forces to the Pakistani side of the Line of Control. After the war, Pakistan made repeated offers of bilateral dialogue and/or international mediation. For more than two years India rejected these offers, announcing that the resumption of any negotiations with Pakistan was contingent on an end of Pakistani support for 'cross-border terrorism'. Instead India attempted to deal directly with the Kashmiri militancy, but failed to attract the All-Party Hurriyat Conference, the main political organization of separatists, into talks. The insurrection among Kashmiri Muslims continued unabated and Kashmiris accused Indian security forces of human rights violations. On 23 May 2001, in a reversal of policy, India's Prime Minister Atal B. Vajpayee invited Pakistan's military ruler, Gen. Pervez Musharraf, for the first talks between the two countries since the Lahore Declaration (February 1999). The Indo-Pakistani summit in the Indian city of Agra failed to make any substantive progress on the Kashmir dispute, or in reducing the risks of a nuclear exchange. After three days of negotiations, the two leaders could not agree on the text of a joint statement, and the summit ended in an atmosphere of bitterness and mutual recriminations, that were tempered the next day by both foreign ministers in separate press conferences (Dugger 2001a; 2001b). The failure of the Agra summit confirmed the need for third party mediation to jump-start a meaningful peace process in South Asia (Baweja 2001, 85). However, during his visit to South Asia in March 2000, President Clinton categorically stated that he '[had] certainly not come to South Asia to mediate the dispute over Kashmir', despite

5 After the Kargil war, General Musharraf warned India at a press conference that 'Pakistan's nuclear deterrence capability must not be under-rated'. See 'Nuclear Restraint Regime: Pakistan Ready for Talks with India, Says CE', *Dawn* (Pakistan), 29 May 2000 http://www.dawn.com.

repeated Pakistani demands of international mediation and UN Security Council resolutions calling for a plebiscite to let the Kashmiris exercise the right of self-determination. The Clinton administration's position was that the United States would not offer to mediate unless both sides requested it do so; a non-starter, because India is well known for its adamant opposition to third party mediation in the Kashmir dispute.[6] By not putting pressure on India to accept third-party mediation, the Clinton administration encouraged India to believe that the Line of Control can become the permanent border between the two countries, a solution that has been repeatedly rejected by Pakistan. The United States should continue its long-standing position that Kashmir *is* a disputed territory and that the issue should be settled by India and Pakistan through peaceful means in accordance with the wishes of the Kashmiri people. One of the purposes of Clinton's stopover in Islamabad in March 2000 was to 'reduce tensions between India and Pakistan'. Yet after the Kargil war, reducing tensions without offering good offices or mediation is a pipe dream. Tensions between India and Pakistan will continue until there is a definite settlement of the Kashmir dispute, which is unlikely in the absence of third-party mediation.

The Lessons of Kargil: Condemned to Nuclear Confrontation?

The Kargil war has been invoked by both proliferation optimists—who argue that the presence of nuclear weapons can contain conflict—and by proliferation pessimists, who argue that the nuclearization of South Asia exacerbates the Indo-Pakistani conflict, creating a situation that resembles a prolonged Cuban missile crisis.

A number of scholars have used the Kargil war as an example of the stability/instability paradox (Chari et al. 2007, 147–48; Karl 2001, 1020–21). According to Karl, 'The Kargil conflict is arguably the latest and most virulent expression of the workings of the stability-instability paradox in the Indo-Pakistani rivalry' (Karl 2001, 1020). However, Kapur (2007, 175 and passim) has shown that 'the stability/instability paradox does not explain Indo-Pakistani military behavior in a nuclear South Asia' for the simple reason that unlike the US-Soviet strategic balance during the Cold War, the Indo-Pakistani strategic balance is inherently unstable. As a result, nuclear escalation '[becomes] a serious possibility in the event that a limited Indo-Pakistani confrontation [spirals] to the level of full-scale conventional conflict. In this scenario, Pakistani leaders could engage in limited conventional aggression believing that India would probably be deterred from

6 India appears to regard mediation as 'national humiliation' ignoring that many other countries, from the United Kingdom to Israel, have accepted international mediation. India invokes the Simla Agreement of 1971, which calls for bilateral negotiations with Pakistan. Yet this accord does not contradict or nullify UN resolutions on Kashmir, nor does it preclude international mediation in the Kashmir dispute. See Cloughley (1999, 236).

launching a full-scale conventional response' (Kapur 2005, 141). Yet after the Kargil war Indian decision makers began to formulate a new military doctrine that would allow India to launch a limited conventional response to future Kargil-like Pakistani provocations.

Instead of leading India and Pakistan to revise their nuclear policy and diplomacy, the Kargil war strengthened their wrong belief that nuclear weapons can guarantee their national security interests. As Chari (2002, 265) notes, 'the ending of the Kargil conflict in a politico-military disaster [did not] inform any moderation in Pakistan's subsequent conduct'. On the contrary, incidents of cross-border terrorism increased after Kargil. On the other hand, as Khan (2003, 64) notes, during the Kargil war, 'neither country [was] deterred by the other, and both engaged in a dangerous game of nuclear brinkmanship, generating the 'dangerous paradigm' of reliance on US diplomatic interventions during Indo-Pakistani crises to ensure 'stability' in the precarious bilateral nuclear equation.

After the Kargil war, India and Pakistan began a nuclear and missile race. India's Draft Nuclear Doctrine, announced in August 1999, revealed that India was moving in the direction of a maximum, rather than a minimum nuclear deterrent,[7] and there was talk about the possibility of more Indian and Pakistani nuclear tests, especially if India deployed a nuclear triad.[8]

After Kargil, there was a *greater danger* of nuclear use in the subcontinent, and Indo-Pakistani nuclear relations showed all the symptoms of a 'permanent' Cuban missile crisis. India's post-Kargil 'limited war' doctrine could lead Pakistan to use nuclear weapons first; and India had not promised not to retaliate in this scenario. In July 1999, a different government in Pakistan could have refused the immediate withdrawal of Pakistani forces from Kargil after the Clinton-Sharif meeting on 4 July 1999; or could have threatened the use of tactical nuclear weapons to stop the Indian counteroffensive to recover Kargil. The new Indian position that nuclear deterrence did not prevent 'limited wars' created a very dangerous situation, considering that nuclear and missile races were well under way. If left unchecked, both races would inevitably raise the stakes in future Kargil-like conflicts. Unfortunately, the US-India alliance, epitomized by the US-India nuclear deal of 2005–2008, has made matters worse for several reasons. First, a closer US strategic relationship with India will probably alienate Pakistan and severely damage the non-proliferation regime. Second, the US-India alliance may have emboldened the Indian government to adopt a more negative position on Kashmir. Third, the US-India alliance increases the danger of conventional war that may escalate to nuclear war, because India may misperceive the alliance with

7 See 'India's Draft Nuclear Doctrine', *Arms Control Today* 29 (July/August 1999), 33–34 and Bearak (1999).

8 See Walker (1999, 23); 'Pak Set to Explode Another Bomb?' *Hindu* (India), 16 May 2000, http://www.the-hindu.com.

the United States as meaning that Washington would look the other way if India initiates a 'limited war' in Pakistani territory.[9]

One of the negative consequences of the Kargil war was the US 'tilt' toward India and a change in US Kashmir policy. After Kargil, the US government would no longer consider Kashmir a disputed territory, and the Line of Control (LOC) would be treated by the Clinton and George W. Bush administrations as an inviolable border between India and Pakistan.

The Kargil war showed the urgent need to de-link Indo-Pakistani nuclear arms control from the Kashmir dispute. Considering the danger of a nuclear exchange, it became important to negotiate a comprehensive Indo-Pakistani nuclear arms control regime, even in the absence of immediate progress towards a resolution of the Kashmir problem. Presumably, Pakistan would now be more amenable to break the link between Kashmir and the nuclear issue. Pakistani governments in the past had refused to break this link, making it very difficult to attract India to serious negotiations.[10] This strategy was based on the assumption that the danger of an escalating conflict in Kashmir and the spectre of nuclear confrontation would eventually involve the United States as an arbiter in the bilateral conflict. Yet Pakistan can no longer count on US support in that scenario. After Kargil and the failure of military adventurism backed by nuclear bluff, Pakistan had strong incentives to de-link Kashmir from the nuclear issue, and negotiate a bilateral nuclear arms control regime now that the threat of nuclear first use had become less credible. In the absence of a non-first use pact, Pakistan could always use nuclear weapons first in desperation, and there was no guarantee that what began as a limited conventional war would not escalate to a nuclear exchange.

The 2001–2002 Border Standoff

The 2001–2002 border confrontation between India and Pakistan—the longest crisis in the history of Indo-Pakistani conflicts—was triggered by a terrorist attack on the Indian Parliament on 13 December 2001. The Indian government blamed Pakistan for the attack and on 18 December 2001 it launched Operation Parakram, 'deploying strike formations comprising tanks and heavy artillery closer to the border. … The force eventually consisted of an estimated 800,000 troops, including its three strike corps, positioned along the India-Pakistan border. Indian air force units and satellite airfields were activated, and the Eastern Fleet

9 During President Clinton's visit in March 2000, it was reported that on arrival in Islamabad he would deliver the message that if Pakistan did not stop supporting the militant Muslim insurgency in Kashmir, 'Washington may well look the other way if India initiates a limited war'. See Baabar (2000).

10 '[Benazir] Bhutto can advance regional peace only by breaking the link between Kashmir and nuclear policy. To date, she has done the opposite. Instead, she treats Kashmir as a potential cause for wider confrontation with India...' (Newberg 1994, 171).

was shifted from the Bay of Bengal to the northern Arabian Sea to join the Western Fleet in a blockade of Pakistan' (Chari et al. 2007, 153). Pakistan reacted with a large-scale counter deployment of its armed forces, in a manner similar to its response to India's Brasstacks exercise of 1987. The Indian and Pakistani armies were in a heightened state of alert for 10 months (January–October 2002) facing each other eye-ball-to-eye-ball across the border.

The 2001–2002 crisis had two separate phases. The first phase began after the terrorist attack against the Indian Parliament on 13 December 2001 and lasted until the second 'peak' of the crisis, on 14 May 2002, when 'a set of suicide bombers launched an attack on an Indian Army base in Kaluchak, near Jammu [in Indian-controlled Jammu and Kashmir] killing thirty-three individuals, mostly the wives and children of army personnel' (Ganguly and Hagerty 2005, 175). The second phase of the crisis began after this terrorist attack and ended on 16 October 2002, when the Indian government announced that Operation Parakram was over.

The height of the crisis was in May-June 2002, when India and Pakistan played a dangerous game of nuclear brinkmanship, confirming pessimist fears that there is a *real* danger of a regional Armageddon in South Asia (see e.g., Trachtenberg, 2002; Sagan, 2003a). Several times in this period a conventional war looked imminent. At the height of the crisis it was reported that India and Pakistan had moved their tactical nuclear warheads along the Line of Control (LOC) and the international boundary (Ali 2002; Gertz 2001; Hersh 2002; Mustafa 2002).

During the crisis, both countries gambled with the nuclear danger, hoping that the other side would behave rationally. In the end, India won a diplomatic victory using coercive diplomacy (Kampani, 2002), although as Chari et al. (2007, 163) note, 'In a way reminiscent of Pakistan's Kargil misadventure, India, too, misjudged the international support it could attract before attempting coercive diplomacy'. In fact, India's diplomatic victory was a Pyrrhic victory. Even if India successfully called Pakistan's nuclear bluff, India is not better off than before the crisis. As long as Pakistan's nuclear weapons exist they can always be used against India by accident or miscalculation; or can be stolen from Pakistan by terrorist organizations that remain very active despite the Musharraf regime's crackdown in response to India's coercive diplomacy.

The dangers of nuclear escalation in South Asia are quite real (Raghavan, 2001, 2002) but during the May–June 2002 crisis both sides seemed to ignore them, overtly talking of nuclear war. The Indian government made two big assumptions: that Pakistan would not resort to nuclear first use if a 'limited' conventional war broke out and that the United States would intervene early to terminate a 'limited' war before it could escalate to the nuclear level. This shows a lack of understanding of the escalatory dynamic built into military campaigns (Raghavan, 2001, 95). During the crisis, senior Indian analysts apparently trivialized Pakistan's nuclear weapons capability.[11] In the next crisis, US diplomacy may fail to prevent nuclear

11 Hoodbhoy (2002) recounts: 'At a recent meeting this January in Dubai, I heard senior Indian analysts say that they are "bored" with Pakistan's nuclear threats and no

first use by Pakistan and/or nuclear retaliation by India. General Kidwai, Director of the Strategic Plan Division of the Pakistani Army, has declared that an Indo-Pakistani nuclear war will not happen because 'rational decision making will keep both countries away from the nuclear brink' (quoted in Italian Report 2002). However, this is a big assumption. Arguably, both the Kargil war and the 2001–2002 border confrontation 'revealed streaks of both rationality and irrationality by Indian and Pakistani leaders' (Chari 2002, 262).

How far would India have to penetrate Pakistani territory for the Pakistani leadership to conclude that the 'space threshold' for nuclear first use has been crossed?[12] Would Pakistan resort to nuclear means at the fall of Lahore, or when a strategic area is about to be overrun? Would Pakistan refrain from using nuclear weapons against India when the Indians turn the scale of the conventional war to their advantage (e.g., by achieving air superiority) even if the 'space threshold' has not been crossed? In an all-out conventional war the Pakistani leadership would be under enormous political and military pressure to use (or threaten to use) tactical nuclear weapons *before* India destroys a large part of Pakistan's land or air forces.[13] Even in a 'limited war', Pakistan could resort to nuclear first use if an Indian attack in Pakistani controlled Kashmir is perceived by the Pakistani High Command as triggering the 'military threshold' for nuclear first use. Moreover, as Ganguly and Kraig (2005, 318) recognize, 'The line between pin-prick, cross-border operations against Pakistan-supported terrorist camps and all-out conventional war was increasingly blurred in Indian planning as the [2001–2002] crisis progressed from January onwards'.

Nuclear weapons are the great military equalizer. India can only ignore this basic fact of international relations at its own peril. In that sense, India's coercive diplomacy is dangerous. India should recognize that the May 1998 nuclear tests were a wrong move, since they pushed Pakistan further into the nuclear club. Pakistan now has the ability to place at risk India's viability as a sovereign state. By testing three nuclear-capable ballistic missiles at the peak of the May–June 2002 crisis, Pakistan made the point that India's comparative advantage in conventional weapons has been nullified by the May 1998 nuclear tests.

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longer believe them. K. Subrahmanyam, an influential Indian hawk who has advocated overt Indian nuclearization for over a decade, believes that India can "sleep in peace"'.

12 According to General Kidwai, four scenarios of conventional war with India would lead to Pakistani nuclear first use: '(a) India attacks Pakistan and conquers a large part of its territory (space threshold); (b) India destroys a large part either of its land or air forces (military threshold); (c) India proceeds to the economic strangling of Pakistan; (d) India pushes Pakistan into political destabilization or creates a large scale internal subversion in Pakistan'. See Italian Report (2002, 5).

13 This scenario was considered by General Sundarji, former chief of the Indian army. See Sundarji (1993, 49–57).

Beyond the Proliferation Optimism-Pessimism Debate: Lessons Learned from the Post-tests Nuclear Crises

Both India and Pakistan are responsible for the nuclear danger in South Asia. Pakistan must admit that it is in its best interest to break the link between the Kashmir dispute and nuclear arms control negotiations, but ultimately India holds the key to make real progress toward nuclear arms control in the region, due to the Indo-centric nature of regional politics, and Pakistan's reactive nuclear diplomacy, 'revolving around perceptions of threat from and hostility toward India' (Ahmed 1999, 179; see also Karp 1998, 14).

After the failure of Pakistani military adventurism in Kargil in mid-1999 and India's pyrrhic diplomatic victory in the May-June 2002 crisis, Pakistan has strong incentives to delink Kashmir from the nuclear issue, now that the Pakistani threat of nuclear first use has become less credible. The post-tests nuclear crises showed that India and Pakistan are engaged in a 'mad nuclear game' (Hoodbhoy 2002) but Pakistan has more to lose than India if the game continues indefinitely, both in terms of diversion of economic resources (Lavoy 2002) and security. Pakistan's nuclear arsenal did not deter India from credibly threatening to launch a conventional attack against it during the May–June 2002 crisis.

The Erosion of the Nuclear Taboo

The two post-tests nuclear crises have not settled the debate between proliferation optimists and proliferation pessimists. Proliferation optimists emphasize the fact that the Kargil war did not escalate to an all-out conventional war; it was a limited war in which India refrained from escalating the conflict to an all-out war fearing that such a move would trigger a Pakistani nuclear response. Proliferation pessimists argue that in a nuclearized South Asia even a limited war like the Kargil conflict could escalate to the nuclear level due to mutual misperceptions, miscalculations, or inadvertence. After Kargil, the Indian doctrine of limited conventional war assumed that India would be able to control escalation below the Pakistani nuclear threshold. At the beginning of the 2001–2002 border confrontation a high level Indian diplomat claimed that there was 'a lot of strategic space between a low-intensity war waged with Pakistan and the nuclear threshold', and that India was threatening to attack Pakistan as a response to the terrorist attack on the Indian Parliament in December 2001, 'without worrying about the nuclear threshold. If that turned out to be a miscalculation and Pakistan initiated the use of nuclear weapons, then India would respond in force and Pakistan would cease to exist'.[14] This type of statement and similar declarations by influential members of the Indian strategic elite show a significant erosion of the nuclear taboo in India after the Kargil war. The 2001–2002 crisis was very dangerous because India was prepared to take the risk of attacking Pakistan even though it

14 Quoted in 'Crisis in South Asia', *The New Yorker*, 8 January 2002, 40.

knew that Pakistan had the capability to retaliate with nuclear weapons. On the other hand, proliferation optimists argue that the Kargil war and the 2001–2002 standoff show the robustness of nuclear deterrence: 'Both crises were contained at levels considerably short of full-scale war' (Ganguly 2008, 65). The proliferation optimist case is based on Waltz's theoretical reasons to believe in the infallibility of nuclear deterrence. Waltz (1981) and McGeorge Bundy (1984) argue that the very existence of nuclear weapons deters rational national leaders from using them in a conflict. Ganguly and Hagerty's (2005) proliferation optimism is based on the same reasoning: if there are good theoretical reasons to believe that nuclear deterrence 'works', why would not it work in South Asia? Yet as Stolar argues, 'this certainty in the infallibility of deterrence obscures the fact that we know little about the deliberations of India's war cabinet during those ten harrowing months [from January 2002 to October 2002] and even less about Pakistan's calculations during the [2001–2002] standoff' (Stolar 2008, 8). Peter Lavoy—a proliferation optimist—recognizes that in South Asia, 'mutual deterrence might not be an automatic condition produced by each side's possession of usable and survivable nuclear weapons' (Lavoy 2003, 85). Still proliferation optimists can argue that during the 2001–2002 crisis at least some Indian leaders 'did consider, and some were concerned about, the possibility of the conflict escalating to nuclear war' (Chari et al. 2007, 181). Luckily, the major decision maker, Indian Prime Minister Vajpayee, was very much concerned about the danger of escalation to nuclear use. Yet whether existential deterrence explains the absence of war in South Asia in 2002 is an open question. Nuclear weapons may have prevented India from contemplating an all-out war with Pakistan, but Indian officials, including Prime Minister Vajpayee, thought that a 'limited' offensive, without threatening Pakistan with 'catastrophic defeat' would not trigger a Pakistan nuclear response. Indian Prime Minister Vajpayee told Paul Kapur that the Indian leadership did not think that Pakistan would have responded with nuclear weapons even if India had attacked: 'Nuclear war was ruled out' (quoted in Kapur 2007, 138). However, the record shows that General Musharraf and the Pakistani leadership did not rule out nuclear war during the crisis. Pakistan could have perceived the damage inflicted on the Pakistani army by Indian 'limited' attacks as serious enough to trigger first use of tactical nuclear weapons (the military threshold for nuclear use in General Kidwai's scenarios, see note 12).

Who 'Won' the 2001–2002 Border Confrontation?

It is unclear who 'won' the 2001–02 border confrontation. After the crisis, President Musharraf claimed that the Pakistani military had succeeded in 'defeating the enemy without fighting a war', and some analysts believe that since India's exercise in coercive diplomacy did not achieve its objectives, Pakistan actually 'won' the 2001–2002 confrontation. Other scholars argue that India won a Pyrrhic victory, because although President Musharraf was forced to promise—in an important speech on 12 January 2002—to prevent Pakistani territory from

being used to carry out acts of terror against India; 'India's threats to escalate the conflict militarily were not really credible' (Ganguly and Kraig 2005, 311) and Pakistan never handed over the twenty individuals sought for terrorist attacks in India. Operation Parakram cost India at least $2 billion, a number of casualties provoked by accidents, psychological stress or bad weather conditions, and 'despite a temporary lull in cross-border infiltration, the flow of militants [from Pakistan] into Jammu and Kashmir by mid-2002 had begun to increase once again' (Kapur 2007, 136). As Ganguly and Kraig (2005, 321) note, India successfully managed to convince the United States to intervene in the crisis 'as a significant player to try and curb Pakistan's continuing support to the [Kashmiri] insurgency and to acts of terror. This achievement came at the cost of abandoning India's long-standing aversion to the involvement of the United States in subcontinental affairs'. Similarly to its stance during the Kargil war, the United States 'tilted' toward India during the protracted 2001–2002 crisis, even though this time it was India, not Pakistan, that was threatening to violate the 'sanctity' of the Line of Control (LOC) in Kashmir and the whole international border in order to 'teach Pakistan a lesson'.

In the final analysis, the failure of Indian coercive diplomacy during the 2001–2002 crisis confirms the hypothesis that the Indian nuclear tests of May 1998 were a strategic misstep. As Ganguly and Kraig (2005, 318) note, 'Without nuclear weapons in place, India could always back up its attempts at compellance and coercion with actual conventional escalations as deemed necessary throughout the crisis: India could credibly threaten, and possibly carry out, a full escalation to conventional war. Successful coercion and compellance is, in the end, based on the credible threat of unlimited conventional war, not limited conventional options'.

Proliferation optimists argue that the Kargil war is the best expression of the workings of the stability/instability paradox in the Indo-Pakistani confrontation (see e.g., Karl 2001). From this perspective, the 'stability' of nuclear deterrence at the strategic level left room for a 'limited' conventional war at Kargil. However, from a proliferation pessimist perspective, one may argue that the stability/instability paradox did not work in May–June 2002, when an all-out war between India and Pakistan appeared imminent and both sides threatened to use nuclear weapons without inhibitions, as if the nuclear taboo did not exist. Similarly, during the Kargil crisis, the strong Indian response and its readiness to suffer heavy casualties to recover control of the snowy peaks at Kargil contradicts the self-deterrence envisaged in the stability/instability paradox. As Karl (2001, 1020) notes, Pakistan 'was reportedly taken aback by the resolve New Delhi displayed and had not anticipated the possibility that events could escalate to open war'. This confirms proliferation pessimism's claim that there was a real danger of a nuclear exchange during the Kargil war. Arguably, the stability/instability paradox is a fallacy that allows pro-bomb advocates to rationalize the idea that it is possible for India and Pakistan to 'live with the bomb', while engaging in low-level warfare and leaving the Kashmir dispute permanently unresolved in order to satisfy powerful domestic

political actors in both countries who have a vested interest in the continuation of the fight over Kashmir.

The Role of Nuclear Weapons

Scholars disagree on the role of nuclear weapons in precipitating the 2001–2002 crisis. Chari et al. (2007, 182) believe that nuclear weapons were not decisive in provoking the crisis. Kapur (2007, 139) argues that 'nuclear weapons played an instrumental role in instigating the crisis in the first place', because 'Pakistan's overt nuclear capacity emboldened Pakistan to take even more provocative steps than it had before'. Even after the failure of the Kargil operation, 'Pakistani leaders remained sufficiently confident in their position to continue Pakistan's strategy of low-intensity conflict against Indian rule in Kashmir unabated' (Kapur 2007, 140). On the other hand, the Indian government and the Indian military became confident that the 'stability' of the nuclear balance would allow India to undertake more aggressive military operations in response to Pakistani support for the Kashmiri insurgency, without fearing escalation to the nuclear level. In the words of General V.P. Malik, 'Kargil showed the way. If Pakistan could do Kargil [without escalation to the strategic level] India could do something similar' (quoted in Kapur 2007, 133).

Did nuclear weapons play a role in resolving the 2001–2002 crisis? Nuclear weapons were clearly in the background, and as Chari et al. (2007, 182) note, 'the fact that both sides had them shaped decisions in Islamabad, New Delhi, and Washington'. However, none of the three capitals learned the right lesson from the 2001–2002 crisis: that nuclear arms control and disarmament is the only way out to the Indo-Pakistani strategic and nuclear predicament, as shown by this protracted crisis. Both India and Pakistan won Pyrrhic victories and yet they continued the madness of a nuclear and missile race in 2002–2008. Despite their nuclear predicament, the political leadership and strategic elite in both countries 'loves' nuclear weapons. India's strategic missteps (nuclear weapon tests in 1998, a coercive diplomacy strategy in 2002) have forced Pakistan to become even more reliant on its nuclear arsenal, as it faces an increasing gap in conventional war-fighting capabilities *vis-à-vis* India. Moreover, Islamabad and New Delhi do not seem to understand the meaning of the nuclear revolution. This is shown by their readiness to use nuclear weapons during the Kargil and 2001–2002 crises. Indian Defense Minister George Fernandes's claim that Pakistan would refrain from a nuclear strike on India because a nuclear exchange would completely destroy Pakistan while India would 'survive' losing only 'a part of [its] population' (quoted in Kapur 2007, 133) was delusional. The Indian strategic elite still seems to hold this view; showing how fragile the nuclear taboo is in South Asia.

After the Kargil war, Indian policymakers recognized that the Pakistani nuclear arsenal represented a real threat to Indian security—Pakistan had issued 'tacit' nuclear threats during the war—concluding that 'India must take nuclear issues seriously' (Tellis et al. 2001, 56). However, disarming Pakistan by accepting arms

control/disarmament proposals was not even considered as an option. Instead, Indian policymakers decided to reinforce India's 'minimum credible deterrent', assuming that 'Pakistan's willingness to exploit its nuclear weaponry for even the most mundane ends might require India to consider developing at least a small set of rapid- response capabilities primarily for shoring up deterrence and "concentrating the mind" of Pakistani decisionmakers who might be tempted to behave irresponsibly in a crisis' (Tellis et al. 2001, 57). India had already done that during the Kargil war, assembling nuclear warheads and readying them to be mated to nuclear capable aircrafts and the Prithvi missile (Chengappa 2000, 437). Yet the faith in a robust nuclear deterrent to keep a nuclear peace in the subcontinent did not prevent the outbreak of the 2001–2002 crisis, in which the two countries again played a dangerous game of nuclear brinkmanship. After this crisis, nuclearism (the cult of the bomb) became even more pronounced in India and Pakistan and there was an aggressive change in India's conventional military posture: the adoption of the 'Cold Start' doctrine (see Ladwig 2007–2008).

Taking nuclear issues seriously could have led India to engage Pakistan in nuclear disarmament negotiations. Yet the global strategic environment was not propitious for nuclear disarmament as the George W. Bush administration in the United States showed contempt for binding nuclear arms control commitments and planned the production of a new generation of 'bunker-buster' nuclear weapons. Disarming Pakistan by accepting Pakistan's arms control and disarmament proposals (on five occasions since assuming power in October 1999 General Musharraf offered Indian Prime Minister Vajpayee to move toward regional denuclearization) was not even considered as an option by India's strategic elite because it was tantamount to renouncing to the newly acquired membership in the nuclear club that was almost guaranteed after the announcement of the Next Steps in Strategic Partnership (NSSP) (a de facto alliance) between India and the United States in January 2004 (see Chapter 5). Instead, India decided to keep the bomb, while building what increasingly looked like a 'maximum' rather than 'minimum' credible deterrent' and isolating Pakistan. As Pakistan's domestic problems opened up the possibility that it could become a 'failed state' it was easy to convince the United States (India's 'natural' ally) that Pakistan must be kept outside the nuclear club. After the discovery of the A.Q. Khan-led nuclear black market network India could make the case that Pakistan was not seriously committed to nuclear export controls and could not be trusted as a serious member of the nuclear club. Although Pakistan is an indispensable ally of the United States in the 'war on terror' the United States refused to grant it the same status as India by announcing that Pakistan was not eligible for a nuclear deal similar to the one signed with India in October 2008.

A Missed Opportunity: Slow Motion Nuclear Weaponization

After the May 1998 nuclear tests, India and Pakistan reportedly faced significant difficulties to implement their minimum nuclear deterrence policy.[15] Sidhu (1998a, 1; 2001, 61) argued that it was doubtful 'whether either India or Pakistan [were] in possession of ready-to-use nuclear weapons'; and that the South Asian rivals maintained their nuclear forces in 'a virtual dealert state', 'making a virtue of a necessity'. In December 2000, *Jane's Defense Weekly* reported that India had not proceeded 'to develop an effective missile-based nuclear deterrent as quickly as Pakistan' and that India had yet to deploy a missile force in quantity (Koch 2000, 22).

After the Kargil war, Ashley Tellis characterized India's nuclear posture as a halfway house between a recessed deterrent and a 'ready arsenal', and persuasively argued that 'bilateral nuclear arms control agreements with Pakistan' could be reached 'without having to traverse the circuitous route of developing a full-fledged arsenal' (Tellis 2001, 243). According to Jaswant Singh, former Indian Foreign Minister, India does not need a nuclear triad nor require nuclear parity with its potential foes. Other Indian officials claimed to have achieved 'a survivable nuclear arsenal and command and control through secrecy, dispersal, and by having the warheads stored separately from the missiles and aircraft delivery systems' (quoted in Koch 2000, 24). 'India's nuclear deterrent rests largely on air-deliverable weapons which the then-AEC Chairman R. Chidambaram confirmed had been in the stockpile for several years before the May 1998 nuclear tests' (Koch, 2000, 24). If true, these reports confirm that despite the post-tests rhetoric about building a minimum nuclear deterrent, when the Kargil war broke out in May–June 1999 India and Pakistan had not yet weaponized their nuclear arsenals; although Pakistan seemed to have gone further down the road to weaponization, while keeping its forces in a highest state of alert than India (Koch, 2000, 23).[16] However, as their nuclear relations began to resemble a prolonged Cuban missile crisis, weaponization and an overt deployed status have been dangerously looming in the horizon since the 2001–2002 crisis. As Kampani (2005, 3) notes, 'both India and Pakistan have initiated a series of intended steps at the technological, organizational, and doctrinal levels to transform their symbolic [nuclear weapon] capabilities into operational and hence usable forces'.

As we have seen in Chapter 3, if India and Pakistan actually deploy nuclear weapons, they will face formidable obstacles to establish a relatively stable 'balance of terror' in South Asia. First, if India wants to deploy a credible nuclear deterrent it needs to considerably increase the production of weapons-grade fissile material to achieve 'threshold deterrence' against China; while completing the

15 See 'Pakistan, India, "Have Not Moved Very Far" to Field Nukes: Cohen', *The News International*, 13 May 2000, electronic version.

16 On the ambiguities surrounding the concept of 'weaponization' see Chapter 3, pp. 58–61.

development and deployment of its Agni missiles, which will only exacerbate a missile race in South Asia, without guaranteeing deterrence stability.

Second, bringing nuclear weapons out of the basement has not encouraged prudent behavior by India or Pakistan. At the height of the Kargil war, 'hawk' Indian strategists argued that nuclear weapons now allowed India to 'teach Pakistan a lesson', attacking Pakistani territory itself. There are several reports that Pakistan issued explicit nuclear threats to India (Baruah 1999) and that both countries came very close to a nuclear exchange (Cirincione 2000, 127; Miller and Risen 2000). After the war, the Indian government made pronouncements about India's willingness to fight a 'limited war'. What made the post-Kargil situation so dangerous was both India's readiness to cross the LOC 'no matter what' and Pakistan's veiled threat of nuclear use if India crossed certain vaguely defined thresholds in a future confrontation.[17] In May 2000, General Musharraf declared at a press conference that Pakistan was ready for talks with India on a nuclear restraint regime, but warned India that 'Pakistan's nuclear deterrence capability must not be underrated'. In October 2000, he told CBS that he 'would never like' to use nuclear weapons. 'But if you ask me a direct question when would I use them … if Pakistan's security gets jeopardized, then only one would like to think of it.'

Third, overtly deployed nuclear forces would compel India to end its self-imposed moratorium and conduct additional nuclear tests in order to deploy the triad of survivable nuclear forces mentioned in the Indian Nuclear Doctrine, thus creating the possibility of a three-way nuclear and missile race in South Asia, involving China. Moreover, India would face the problem of ensuring the survivability of a deployed minimum deterrent from external attack and internal sabotage (Chari 2002, 273).

Fourth, India and Pakistan would have to decide whether to pursue a countercity or counterforce strategy. As Chari (2002, 273) notes, 'a targeting policy that consciously focuses on cities would be morally repugnant', and would contradict 'India's earlier offer to Pakistan of extending the agreement on non-attack of nuclear installations to cities and large economic centers'. On the other hand, a counterforce strategy would create the danger of uncontrollable escalation from conventional to nuclear war. Because of its conventional military inferiority, Pakistan relies heavily on its nuclear weapons for deterrence, and has strong incentives to adopt a counterforce strategy. In a deteriorating military situation, 'Pakistan's preferred option' would be 'to escalate quickly to the nuclear level' (Raghavan 2001, 93). Geographic proximity, combined with inadequate early warning systems, would be a source of deterrence instability, because Pakistan would be tempted to adopt a hair-trigger, launch-on-warning nuclear posture, fearing an Indian first strike in a crisis. This would significantly increase the danger of accidental nuclear war.

For all these reasons, after the Kargil and 2001–2002 crises it was important for India and Pakistan to reach a nuclear settlement. It was still possible to establish a

17 See note 12.

strong nuclear arms control regime in South Asia. In his seminal study on India's' emerging nuclear doctrine, Tellis (2001, 401) noted that India's relatively small nuclear arsenal of 150-odd weapons, '[did] not yet exist and probably will not exist *in full form* for at least another decade or two' (emphasis added). Tellis argued that 'India still confront[ed]s a set of choices similar to those it faced prior to the tests', and that 'India's nuclear "force-in-being" represent[ed] a continuation of the classic Indian preference for 'keeping the option open' (Tellis 2001, 247 and 719). He also noted that India had produced weapon-grade plutonium at a rate much lower than was generally assumed; and that 'when all is said and done, nuclear weapons provide India with only ambiguous benefits, not clear and incontestable advantages' (Tellis 2001, 168). Building a full-fledged, 'ready' nuclear arsenal would be prohibitively expensive for India, detracting resources from economic restructuring to competitively insert India in the global economy. According to Tellis (2001, 240), 'The opportunity costs of a robust nuclear arsenal may therefore turn out to be too high and much more subversive of Indian security when added to the already-steep direct costs of weaponization' (see also Lavoy 2002, 265–67). Despite pressure from the 'nuclear hawks', India had not made any of the very expensive investments in the complex supporting and procedural systems required to resolve the tensions between safety, survivability, connectivity, and penetrativity in a full-fledged 'robust' and 'ready' nuclear arsenal (Tellis 2001, 235, 239).

Tellis's account shows that after the Kargil and 2001–2002 crises there was still a window of opportunity for India to negotiate a strong nuclear arms control regime with Pakistan and China.

Yet India and Pakistan did not take advantage of this window of opportunity, and embarked on a nuclear and missile race with no end in sight (see Joshi 2007). India claims that its nuclear capabilities 'represent political rather than military instruments' (Tellis 2001, 473; see also Perkovich 1999, 458) but nuclear weapons *are* instruments of war, and there is no guarantee that they will not be used in a future Indo-Pakistani conflict. Creeping weaponization is a dynamic process and despite the strong tradition of civilian control of the military in India, eventually the military will become involved in nuclear decision-making, thus increasing the danger of nuclear use in a crisis. Moreover:

> Once instituted in full-fledged form, [India's] arsenal would be difficult and costly to draw down, and such a drawdown would probably never occur except as part of a global agreement on denuclearization – an outcome that, even if possible, is many decades away (Tellis 2001, 242–243).[18]

18 The experience of the superpowers during the Cold War is painfully instructive of the tremendous cost of building, and then drawing down, full-fledged nuclear arsenals. See Schwartz (1998).

The 2001–2002 Standoff: The 'Last' Indo-Pakistani Nuclear Crisis?

As Stolar (2008, 31) notes, 'Given the enduring challenges which confronted national leaders during the 2001–2002 standoff, India and Pakistan's nascent peace process, initiated in 2003, gives hope that peace and prosperity can replace crisis and confrontation in South Asia. From crisis comes opportunity'. Other scholars share Stolar's cautious optimism. For example, Basrur (2008, 94) argues that 'nuclearization has created new risks that encouraged [India and Pakistan] to talk'. According to Basrur, the 'new thinking' that followed the 2001–2002 crisis 'brought unprecedented and unexpected changes, ….[infusing] the idea of a compromise solution [to the Kashmir dispute] with "respectability"; made the future more important than the past; brought a new focus on the people of Kashmir; and created a smooth and regular negotiating channel between the old rivals' (Basrur 2008, 94). Yet Basrur admits that 'there is little prospect of a rapid unwinding of the India-Pakistan cold war because at the level of domestic politics, the identity issue revolving around Kashmir and the domestic politics of the two countries are not conducive to it'.

The two post-tests crises, coupled with the US-led war on terror, that 'placed the United States front and center in South Asia for the first time' (Nayak 2002, 2) have changed the dynamics of the India-Pakistan conflict. In an important speech on 12 January 2002 President Musharraf pledged that 'no organization will be allowed to perpetuate terrorism behind the garb of the Kashmiri cause…we will take action against any Pakistani who is involved in terrorism inside the country or abroad' (quoted in Eckholm 2002). Pakistan banned two terrorist organizations that had been blamed for the December 2001 attacks on the Indian parliament, and gradually took steps to reduce cross border violence, especially after the second 'peak' of the 2001–2002 crisis, in May 2002. Yet Pakistan failed to completely stop the infiltration of terrorists into Indian-controlled Kashmir. In that sense, India's exercise in coercive diplomacy was a Pyrrhic victory. However, the resolution of the 2001–2002 standoff in October 2002, (when India withdrew its massive concentration of forces along the border with Pakistan) provoked a thaw in Indo-Pakistani relations, including the establishment of a cease-fire along the line of Control (LOC) in November 2004, 'a resumption of air and rail links between India and Pakistan; a written commitment by Pakistan not to allow its territory to be used for terrorist activity; meetings between the Indian government and leaders of the Kashmiri separatists All Parties Hurriyat Conference; and peace talks between Indian and Pakistani foreign secretaries' (Kapur 2007, 137).

The Composite Dialogue: An Enduring Peace Process?

The most important consequence of the resolution of the 2001–2002 border confrontation was the revival of the Indo-Pakistani 'composite dialogue' that dates back to June 1997 (Croft 2005, 1042). Starting in February 2004, the composite dialogue covers eight subjects that India and Pakistan have identified as bilateral

disputes, ranging from the territorial and water related disputes over the Siachen Glacier, Sir Creek, and the Wullar Barrage to checking terrorism and drug trafficking, promoting economic cooperation and friendly exchanges, and easing the requirements to grant visas to each other's citizens.

The composite dialogue has had ups and downs and it has often been on the brink of collapse, following terrorist attacks against India such as the attack on the Indian embassy in Kabul on 7 July 2008, or the multiple terrorist attacks in Mumbai on 26–29 November 2008, that have been described as 'India's 9/11'. After the attacks, Indian Foreign Minister Pranab Mukherjee said that 'it was difficult to continue the current peace process with Pakistan'.

During the five rounds of the 'composite dialogue' both India and Pakistan have made concessions: India no longer claims that Kashmir's accession to the Indian Union must be final; Pakistan no longer demands a plebiscite (as called for in United Nations Security Council resolutions) or a final settlement of the Kashmir issue as a prerequisite for progress on other issues. 'Currently Pakistan stresses that it will consent to whatever is acceptable to the Kashmiris' (Chari et al. 2007, 209).

Progress in the area of Nuclear Risk Reduction Measures (NRRMs) has been slow. At the second round of the composite dialogue (May–September 2005) India and Pakistan failed to reach agreements on two obvious 'quick wins': the pre-notification of the flight-testing of missiles and how to operationalize the hotline between the foreign secretaries. As Croft (2005, 1057) notes, 'Establishing the composite dialogue was one thing; maintaining momentum and securing product, something rather different'. Both parties finally concluded the agreements on the hotline between the two foreign secretaries, and on pre-notification of missile testing; while reaffirming the moratorium on conducting further nuclear tests (Chari et al. 2007, 209). However, after the conclusion of the US-India nuclear deal in September–October 2008 there was talk about the possibility of further Indian nuclear testing, not formally prohibited in the nuclear deal with the United States. India needs to carry out further nuclear tests in order to achieve 'threshold deterrence' against China. If it does so, Pakistan will probably follow suit.

Confidence building measures (CBMs) and nuclear risk-reduction measures (such as the February 2007 agreement to notify each other in case of accidents relating to nuclear weapons or nuclear materials) are important to diminish the danger of a nuclear exchange in South Asia, but they may not prevent nuclear use in a future crisis, considering the poor historical record of CBMs. Hence the importance of negotiating a binding and verifiable nuclear arms control regime. In the meantime, measures such as non-deployment or de-coupling warheads from delivery systems are urgently needed, even if taken unilaterally, to avoid nuclear use early in an unexpected crisis.

Certain nuclear risk reduction mechanisms (such as risk reduction centers manned by mixed groups of officials from both countries) are important to avoid unintended conflicts and reduce tension in times of crisis. If implemented, these measures may help prevent a nuclear exchange. However, without a minimum of

mutual trust it will be very difficult to implement bilateral NRRMs. An important NRRM would be an agreement to communicate the other side missile movements within one own's territory for purely training purposes, or in preparation for a flight-test. However, doing so would be 'an unpopular option with the Indian Army, which is reluctant to share information that would reveal the operational and tactical maneuvers of their newest unit' (Sidhu 1998b, 45). As Gagné (2001, 56) notes,

> It will be difficult for India and Pakistan to reach new agreements for exchanging sensitive information about their nuclear weapons programs. The exchange of some information might actually be destabilizing... in this early stage of weaponization, neither country is confident enough to reveal much about their nuclear capabilities.

The dilemma of how much information to reveal without compromising national security shows an inherent limitation to CBMs and NRRMs. Without an adequate system of verification, NRRMs may be ineffective. De-alerting ballistic missiles is a useful measure to reduce the tensions and risks associated with missile systems, but the best strategy to prevent accidents or unauthorized use is to devalue the role of missiles in strategic interactions, through *nuclear arms reduction* agreements. NRRMs just widen the distance between the nuclear sword of Damocles and the heads of millions of people in South Asia; they do not, by themselves, eliminate the nuclear danger. As Naqvi (2001) has noted, CBMs and NRRMs may create a 'false sense of security' that would 'fly away' 'as soon as political clouds appear'. NRRMs are necessary, but they must be seen as building blocks to negotiate broader nuclear arms control agreements.

As Croft (2005, 1058) notes, 'The composite dialogue is a useful framework; but it is not much more than a framework. Too much should not be expected of this collective process'. The fragility of the composite dialogue is shown by its evolution from 2007 to 2008. In September 2007 India and Pakistan seemed to have achieved an agreement on the Siachen Glacier dispute and there were serious prospects of converting the glacier into a 'peace mountain', as proposed by Indian Prime Minister Manmohan Singh in 2005. The significant changes in Pakistan's Kashmir policy (no longer insisting on a plebiscite) opened up the possibility of a resolution of the Kashmir dispute. However, the composite dialogue was disrupted by a terrorist attack against the Indian embassy in Kabul, Afghanistan, in July 2008 (the Indian government accused the Pakistani army's intelligence agency, ISI, of being involved in the attack). The Indo-Pakistani peace process was further undermined by a controversy over the donation of government land in Jammu and Kashmir to a Hindu shrine. The donation generated widespread anti-Indian protests in Kashmir, 'as Muslim protesters resorted to pro-independence rallies, the biggest the [Kashmir] valley has seen in the past two decades' (Bhadrakumar 2008). As Dennis Kux notes, 'The Indian government's decision of land transfer

was a major blunder', and 'it just opened up a sore that was there and that had been simmering underneath the surface' (quoted in Bajoria 2008).

The fact that Pakistan has taken steps to reduce cross-border violence has helped the 'composite dialogue' to keep going, but more moderate Pakistani behavior is not enough to arrive at a final settlement of the Indo-Pakistani conflict. As long as the Kashmir dispute remains unsolved India will continue describing Kashmir as a 'terrorism problem' and Pakistan will continue describing the conflict as a self-determination issue. The continuing irresolution of the Kashmir dispute will continue fuelling the Kashmiri insurgency and terrorist organizations such as Lashkar-e-Taiba, will be able to continue recruiting militants for further terrorist attacks that have the potential to destabilize Indo-Pakistani relations given the history of Pakistani support for Islamic militant groups operating in Kashmir. As long as the Kashmir dispute remains unsolved and the war on terror intensifies in Pakistan (especially in the tribal areas bordering Afghanistan) the Indo-Pakistani peace process will be fragile and prone to be unraveled by bilateral crises provoked by terrorists attacks such as the multiple attacks in Mumbai on 26–29 November 2008. A fair settlement of the Kashmir dispute, taking into account the wishes of the Kashmiri people through a plebiscite or other democratic mechanism would deprive the terrorist groups actively operating in Pakistan and India of an important propaganda instrument. However, the key to launch a bilateral peace process on a more solid footing is a resolution of the 'war on terror' and an unwavering Pakistani commitment to fully support US efforts to dislodge the Taliban and Al Qaeda from Pakistan's tribal areas bordering Afghanistan.

Conclusion: Taking Stock of the Post-Tests Nuclear Crises

Scholars profoundly disagree on the important question of whether nuclear deterrence actually 'worked' during the Kargil and 2001–2002 crises. Chari et al. (2007, 214) claim that 'Deterrence now seems to be firmly in place, with a de facto situation of mutual nuclear deterrence, as both states have the ability to wreak unacceptable damage on each other'. Yet Paul Kapur has shown that nuclear weapons did not deter escalation during the 2001–2002 crisis. He quotes General Malik who said that during the Kargil war, "'if the tactical situation had not gone well, India would have crossed the LOC" and not been deterred by Pakistan's nuclear capacity' (see Kapur 2007, 128). During the 2001–2002 crisis, Indian policy makers and the Indian strategic elite seemed to have been confident that in the same way as Pakistan could 'do Kargil' without escalation, India could cross the Line of Control and fight a 'limited' conventional war with Pakistan without escalation to the nuclear level. This assessment seems to be confirmed by Lalit Mansingh, India's Ambassador in Washington during the 2001–2002 crisis. According to Stolar, Ambassador Mansingh 'worked hard to communicate to Washington [that] this is serious—[the] Government of India would take steps without hesitation'. 'Deterrence', Mansingh said, 'we were prepared to disprove

that. We don't care if Pakistan has nuclear weapons—there is a price to be paid' (quoted in Stolar 2008, 12–13). Nuclear deterrence may have facilitated—as Kapur [2007, 87] argues—'provocative Pakistani behavior in the wake of the 1998 tests, thereby triggering major Indo-Pakistani crises such as the Kargil conflict and the 2001–2002 standoff', but nuclear deterrence in itself, did not guarantee the establishment of a 'nuclear peace' in the subcontinent. On the contrary, as the crisis provoked by the November 2008 multiple attacks on Mumbai shows, in the absence of a serious nuclear arms control and disarmament regime, the two South Asian rivals are condemned to suffer recurrent crises that have the potential to escalate to the nuclear level.[19]

On the other hand, proliferation optimists could argue that since India refrained from implementing the threat to go to war in 2002 nuclear deterrence actually 'worked'. This optimistic assessment seems to be confirmed by the restrained initial Indian response to the multiple terrorist attacks in Mumbai on 26–29 November 2008, preferring the diplomatic route (while the United States put pressure on Pakistan to turn in the individuals accused of the attacks) rather than repeating the failed strategy of a military mobilization (coercive diplomacy) that did not work in 2001–2002. In that sense there has been a limited 'learning process' on the part of India since 2002, although the adoption of an aggressive conventional military posture (the 'Cold Start' doctrine) after the 2001–2002 crisis increases the prospects of military escalation in a future Indo-Pakistani conflict.

The multiple terrorist attacks on Mumbai in November 2008 threaten to paralyze the Indo-Pakistani 'composite dialogue', but it was already difficult to make progress on the central issue of peace and security—Kashmir—even before the Mumbai attacks. As Croft (2005, 1057) notes, there has always been a danger 'of mistaking atmospherics for policy and commitment'; and there is no guarantee that making progress on one issue area –Siachen, Sir Creek, or the prisoners issue—will spill over into the more complex and problematic issues, such as Kashmir. Moreover, like the 'war on terror' the Indo-Pakistani composite dialogue is a process without end that could implode during one of the recurrent Indo-Pakistani crises under pressure from domestic political actors that have a vested interest in the indefinite continuation of the Indo-Pakistani conflict.

According to Ganguly and Kraig, India's attempt at coercive diplomacy during the 2001–2002 crisis was undermined not only by the existence of Pakistan's nuclear arsenal and the possibility of escalation of a large-scale conventional war to the nuclear level, but also by five 'structural realities' of the South Asia conflict:

19 At the outset of the crisis provoked by the multiple terrorist attacks on Mumbai in November 2008, 'Pakistani security officials warned that they were prepared to move troops toward the border if need be. The security officials said that if the situation worsened, troops stationed in western Pakistan could be moved within 72 hours. We're ready for any contingency' (Perlez and Masood 2008).

> Pakistani dependence on Kashmir to validate its self-defined identity as a haven for Muslims in a subcontinent dominated by Hindu and secular ideologies, Pakistan's economic and social weakness; prominent perceptions by Pakistani elites (especially those in the army) that Indian military forces constitute an existential threat; Pakistan's sizable land-based conventional military forces; and the geographic realities of India and Pakistan's border areas (Ganguly and Kraig 2005, 312).

These structural realities will undermine India's attempts at coercive diplomacy during future Indo-Pakistani crises; but Ganguly and Kraig neglect the impact of countervailing forces and structural factors that will moderate the Pakistani elite's resolve and willingness to take risks: the dismal state of the Pakistani economy, that forces Pakistan to press India for a peaceful settlement of the Kashmir dispute, even if it has to make big concessions; and increasing international (US) pressure on Pakistan to curb terrorism in Kashmir and eliminate the Taliban/Al Qaeda terrorist threat in the Pakistani tribal areas bordering Afghanistan. Growing domestic terrorism by Islamist militant groups inside Pakistan (exemplified by the Islamist militants' attempt to kill former President Musharraf and the terrorist attack on the Marriott hotel in Islamabad in September 2008) may force the civilian government in Pakistan, headed by President Asif Ali Zardari, to adopt a much stronger policy of curbing Islamist militant groups. If India is more responsive to Pakistani overtures for a prompt settlement of the Kashmir dispute the composite dialogue may survive the multiple terrorist attacks on Mumbai in November 2008 and may even achieve real progress in key areas such as nuclear arms control and the Kashmir dispute.

As Croft (2005, 1058) rightly notes, abandoning the composite dialogue 'risks allowing the [Indo-Pakistani] relationship to fall prey to worst-case analyses on both sides, and to the pressure of crises'. Yet as long as the Kashmir dispute remains unsolved, there is always a potential for bilateral crises. Unfortunately India and Pakistan have gotten used to it, knowing that they can afford to practice nuclear brinkmanship because the United States will always come to rescue them from falling off the precipice of nuclear war. The composite dialogue clearly needs recalibration and possibly US mediation to help India and Pakistan reach an agreement on the Kashmir dispute. As Chari et al. (2007, 220) notes, India needs to normalize relations with Pakistan if it wants to play a larger role on the world stage. Yet India wants to normalize relations with Pakistan on its own terms, without making concessions. Pakistan, in turn, may perceive India's adamant refusal to make concessions as an attempt to make of Pakistan a 'Western Bangladesh' (a militarily weak, satellite state) while reasserting its hegemony in South Asia.

As Nayak (2002, 1) points out, 'Adroit US and allied diplomatic intervention [in May 2002] reduced the imminence of conflict, but left an *untenable dynamic* between the two sides' [my emphasis]. Left on its own, the dynamics of the Indo-Pakistani conflict is not going to sort itself out. India invokes the Simla agreement of 1972 to prevent the United States from becoming actively involved in the

resolution of the Kashmir dispute. Yet in the post-9/11 era the United States has already become heavily involved in South Asia for geostrategic reasons. As we will see in the next chapter, the United States has abandoned the goal of halting and reversing the spread of nuclear weapons in South Asia, subordinating its non-proliferation policy to the 'war on terror' while tilting toward India with an ill-advised policy of de-linking US-Indian relations from US-Pakistani ties. Yet the recurrent Indo-Pakistani crises (a prolonged 'Cuban missile crisis) force Washington to constantly intervene to defuse dangerous crises that have always the potential to escalate to the nuclear level. Most South Asia experts agree that for a number of reasons 'the United States will remain deeply involved in the subcontinent' (see e.g., Chari et al. 2007, 218). However, the United States cannot afford to play the role of conflict manager indefinitely; it must play an activist role in the resolution of the Kashmir dispute, re-balancing US policy toward both countries.[20] A final settlement of the Kashmir and Siachen glacier disputes may lead Pakistan to at least partly abandon its traditional definition of India as a major threat to Pakistani security while single-mindedly focusing on dealing with its domestic terrorist threat and the Al Qaeda/Taliban threat in the border area with Afghanistan. For the Pakistani military, India has always been Pakistan's major 'existential threat' and it would take a final resolution of the Kashmir dispute *and* a major change in US policy toward South Asia (abandoning the 'tilt' toward India) to get Pakistan to focus on its western borders. Whether the United States can recalibrate its South Asia policy to reduce the damage to Indo Pakistani relations from the 'war on terror' while obtaining binding nonproliferation commitments from the South Asian rivals is the subject of the next chapter.

Proliferation optimists believe the Indo-Pakistani composite dialogue is unlikely to be reversed (see e.g., Basrur 2008, 97), but it might well become irrelevant. Basrur rightly notes that 'Much depends on the future of Pakistan, which stands at a critical juncture in its political history'. Yet if Pakistan becomes a failed state due to the inability of its weak civilian government to eliminate the terrorist threat, the composite dialogue will probably collapse. Even if it does not collapse, the recurrence of Indo-Pakistani crises provoked by terrorist attacks—such as the November 2008 attacks on Mumbai—may significantly delay progress on the key issues, such as the Kashmir dispute. As Chari et al. (2007, 220) note, the lesson of the post-tests crises in 1999 and 2001–2002 is that India believes 'that conventional war, limited or otherwise, is possible under the nuclear shadow' and that Pakistan believes 'that subconventional conflict can be pursued under the

20 During the 2008 presidential campaign president-elect Obama 'indicated his desire to appoint a special envoy on Kashmir that caused much unease in New Delhi'. See 'Menon to meet Obama Team in US Monday', *Hindustan Times*, 30 November 2008. The Obama administration may play an active role in the resolution of the Kashmir dispute. A settlement of the Kashmir issue would facilitate Obama's strategy of focusing on Afghanistan as the central theater of the 'war on terror' by allowing Pakistan to concentrate its military forces on its Western border.

aegis of nuclear deterrence'. Yet they still hold these dangerous beliefs because the international community has failed to press them in a different direction; toward a settlement of the Kashmir dispute and a nuclear arms control and disarmament regime. The very existence of India's 'Cold Start' military doctrine shows that nuclear deterrence is not working in South Asia; India does not fear the Pakistani threat to use nuclear weapons against the Indian homeland. As a senior US official worries, the Indians 'think that they can fight three or four days, and the international community will stop it. And they believe that they can fight through a nuclear exchange' (quoted in Kapur 2008, 91). The international community is partly responsible for Indian behavior; the Indians have gone so far in their military doctrine because the United States—as we will see in the next chapter—has not put any pressure on them to constrain their nuclear program, let alone their nuclear doctrine for using the bomb in future crises. 'Cold Start' can be seen as a byproduct of the absence of *any* US nonproliferation policy toward South Asia during the George W. Bush administration. Yet as Stolar (2008, 31) notes, nuclear tinged crises such as the Kargil war and the 2001–2002 standoff are fraught with risk but also with opportunity. A new US nonproliferation policy toward South Asia—moving from conflict management to conflict resolution—would help India and Pakistan to move permanently away from the edge of a nuclear confrontation, while laying the basis for a robust nuclear arms control and disarmament regime in order to remove the nuclear sword of Damocles that is pending over the heads of millions of people in South Asia.

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Chapter 5
US Policy Toward South Asia: From Non-Proliferation to Post-Proliferation and the US-India Nuclear Deal[1]

Introduction

This chapter examines the history of US non-proliferation policy toward South Asia: from non-proliferation to post-proliferation, with the *de facto* recognition of India and Pakistan as nuclear weapon states during the George W. Bush administration. It considers the possibility of bringing US non-proliferation policy toward the region back on track, as part of a broader effort to marginalize nuclear weapons from international politics and eventually eliminate them.

The failure of US non-proliferation policy toward South Asia became dramatically apparent when India and Pakistan tested nuclear weapons in May 1998. The Clinton administration strongly condemned the tests, imposed economic sanctions mandated by the 1994 Glenn Amendment, and conducted a series of parallel 'nuclear dialogues' with India and Pakistan. Yet by November 1999, President Clinton recognized in a report to the US Congress that 'little progress' had been achieved after eight rounds of talks with India. By the end of the Clinton administration, India and Pakistan had not halted the production of fissile material for nuclear weapons and insisted that they would deploy 'credible' minimum nuclear deterrents. Both countries have backed down from commitments to 'adhere to the Comprehensive Test Ban Treaty (CTBT) within one year and before a September 1999 CTBT conference' (Mistry 1999, 765).[2] Except for the moratoria on nuclear

1 Portions of this chapter are drawn from Mario E. Carranza, 'At the Crossroads: US Non-proliferation Policy toward South Asia after the Indian and Pakistani Tests', *Contemporary Security Policy*, Vol. 23, No. 1 (April 2002), pp. 93–128; and from Mario E. Carranza, 'From Non-Proliferation to Post-Proliferation: Explaining the US-India Nuclear Deal', *Contemporary Security Policy*, Vol. 28, No. 3 (December 2007), pp. 464–93. Reproduced with permission of Taylor and Francis, http://www.informaworld.com.

2 Pakistan and India declared their intention to sign the CTBT in separate speeches delivered at the UN in September 1998 by Pakistani Prime Minister Nawaz Sharif and Indian Prime Minister Atal B. Vajpayee. On 23 September, Sharif promised to sign the CTBT 'within a year' if economic sanctions against Pakistan ended. On 24 September Vajpayee said: 'We are prepared to bring these discussions to a successful conclusion so that the entry into force of the [CTBT] is not delayed beyond September 1999'. See Crosette 1998.

testing in the Lahore Declaration,[3] and an Indian and Pakistani commitment to abide by export controls of sensitive nuclear materials, none of the other non-proliferation benchmarks demanded by the United States has been accomplished. Since India and Pakistan have not signed the Comprehensive Test Ban Treaty (henceforth CTBT) they may resume nuclear testing if their nuclear establishments deem it necessary in order to produce a 'credible minimum nuclear deterrent'; especially in the case of India, which is developing a long-range ballistic missile, the Agni-3, in order to achieve threshold nuclear deterrence with China. The US-India nuclear deal approved in September 2008 by the Nuclear Suppliers Group (NSG) and by the US Congress in October 2008 does not have a requirement to cut off nuclear trade if India resumes nuclear testing.

Despite its non-proliferation achievements (such as the indefinite extension of the NPT in 1995 and the signing of the CTBT in 1996) the Clinton administration's non-proliferation policy toward South Asia was on the whole, a failure, with several negative consequences for the non-proliferation regime.

The conventional wisdom is that the United States should quietly accept the 'new nuclear realities' of South Asia and deal with India and Pakistan as *de facto* nuclear weapon states, abandoning the non-proliferation agenda set out by the Clinton administration after the tests. The Clinton and George W. Bush administrations concluded that India's and Pakistan's deployment of a minimum nuclear deterrent was inevitable. With the US-India nuclear deal signed by Secretary of State Condolezza Rice and Indian External Affairs Minister Pranab Mukherjee on 10 October 2008, India has gained an almost explicit recognition of its 'right' to have the bomb. The United States has adopted a post-proliferation policy toward South Asia, focusing on how to manage the Indian and Pakistani nuclear arsenals. Bruce Riedel, an advisor to President Obama, summarizes the conventional wisdom as follows: 'The effort to create international constraints on the Indian and Pakistani nuclear-weapons programmes failed. Our goal now must be to do all we can to ensure they are never used' (Riedel 2008, 16).

During his visit to South Asia in March 2000, President Clinton told the Indian leadership that 'the world needs India to move away from nuclear weapons', but the whole thrust of his trip was to recognize India as a potential great power and as a 'strategic security ally of the United States'. During the visit, White House officials declared that India would ultimately decide whether it wanted to keep the bomb, whereas an explicit purpose of Clinton's five-hour stop in Pakistan was to engage it 'on issues of non-proliferation of nuclear weapons and press Pakistan to

3 The Indian and Pakistani prime ministers signed the Lahore Declaration on 21 February 1999, following a historic weekend bus trip to Pakistan by Indian Prime Minister Atal B. Vajpayee. Besides the nuclear testing moratoria, the two nations promised to build trust in each other through a series of high-level bilateral meetings and to adopt several security and confidence-building measures (including prior notification of ballistic missile tests) to reduce the risk of accidental nuclear war. See 'India, Pakistan Agree on Security, Confidence-Building Measures', *Arms Control Today* (January/February 1999), 21.

sign the CTBT *even if India refuses to sign*' (Husain 2000, italics added). Beginning in October 1998 all post-tests economic sanctions against India and Pakistan were progressively lifted. Pakistan has been handsomely rewarded for its support of the US-led 'war on terror'. In 2003 President Bush announced a five-year, $3bn economic and military assistance package to Pakistan. India has been allowed to import from the United States formerly prohibited dual-use high technology goods (those with military applications) as a result of the Next Steps in Strategic Partnership (NSSP) agreement signed by US President Bush and Indian Prime Minister Vajpayee in January 2004. Post-tests sanctions (such as tightening export controls, or cancelling foreign assistance and military sales) were supposed to be lifted only in exchange for concrete non-proliferation commitments on the part of India and Pakistan. Yet in less than two years, 'the US Congress swung from applauding strict sanctions to urging the president to waive not only the Glenn amendment but also the Pressler and Symington amendments, which mandate further penalties for states engaged in certain nuclear activity' (Hathaway 2000, 7).[4] By the end of Clinton's visit to South Asia in March 2000, the United States was beginning to accept a nuclear India.[5]

The acceptance of India's and Pakistan's nuclear weapons status is bad policy, even if the crisis of global nuclear arms control makes the goal of South Asian denuclearization harder to achieve in the near term. According to Thakur (2000, 121), 'In the clash between new strategic realities and selective puritanism, the latter has to give way: that which has been tested may be detested, but cannot be de-tested'. Yet South Africa secretly tested nuclear weapons in the South Atlantic in 1979 and then 'de-tested'; showing that a country can denuclearize after testing nuclear weapons.

The conventional wisdom is that the governments in New Delhi and Islamabad are not going to renounce nuclear weapons. This is reinforced by the weakness of

4 The 1976 Symington Amendment prohibits US economic and military assistance to any nation importing uranium enrichment or plutonium reprocessing equipment or technology unless the recipient accepts IAEA safeguards on all of its nuclear activities. See Spector and Smith (1990, 108–109). After the 1998 tests, the United States imposed sanctions on India and Pakistan under the 1994 Glenn Amendment, including the suspension of US economic and military aid and a ban on US banks' loans and credits to both governments. Moreover, the United States won support from the Group of 8 to postpone consideration of IMF and World Bank loans to India and Pakistan. Yet in March 1999 the Brownback Amendment suspended Glenn Amendment foreign aid sanctions for five years and repealed the 1985 Pressler Amendment, which mandated the suspension of economic and military aid to Pakistan unless the US President could certify that Pakistan did not possess a nuclear explosive device. See also Mistry (1999, 763).

5 'Asked how a lack of progress on drawing India into the global regime for nuclear arms control could inhibit bilateral ties, Clinton gave no direct response. That was a departure from the link made explicitly by US Secretary of State Madeleine Albright last week'. 'Washington Beginning to Accept a Nuclear India', *The News International* (Pakistan), 22 March 2000, http://www.jang.com.pk/thenews.

the US position: the United States cannot ask other countries to move away from nuclear weapons when it is not prepared to do the same. In the early 2000s, the Bush administration's policy of 'strategic engagement' with India (reciprocated by the Bharatiya Janata Party's government enthusiastic praise of President Bush's missile defence plan) reinforced the Indian elites' perception that 'their country [was] once again destined to become a great state' and that nuclear weapons were essential to achieve that goal. India was not going to accept nuclear disarmament so easily because it would imply losing 'greatness' (Cohen 2000, 17–19)

Yet the United States cannot recognize India as a legitimate nuclear weapon state without irreparably damaging the nuclear non-proliferation regime. The contours of the International Nuclear Order (INO) in the twenty-first century are still hazy, and the prospects for making quick progress toward global nuclear disarmament may be uncertain. Yet India and Pakistan are arguably deviant cases. One hundred eighty two countries have formally renounced nuclear weapons and joined the Nuclear Non-Proliferation Treaty (NPT) as non-nuclear weapon states (NNWS). The five declared nuclear powers, also NPT parties, pledged an 'unequivocal undertaking ... to accomplish the total elimination of their nuclear arsenals' at the 2000 NPT Review Conference and will be hard pressed in the years ahead by the non-nuclear weapon states to abide by that commitment (Johnson 2000). Once the United States assumes the responsibility of leading the international community toward the marginalization of nuclear weapons (as a step on the way to their total elimination) India will have to make good on its 'unconditional commitment' to global nuclear disarmament, on a non-discriminatory basis. Pakistan has long supported regional denuclearization as long as India takes the first steps in that direction.

The primary objective of US policy should be the denuclearization of South Asia, as part of a broader effort to break the proliferation network in the Asia Pacific region and beyond, in order to increase the prospects for global nuclear disarmament. The alternatives would lead to significantly worse outcomes and decreased security for the United States and the world, for three reasons. First, because of the difficulties to stabilize nuclear deterrence between India and Pakistan and the danger of an Asian 'nuclear reaction chain' (Cirincione 2000). Second, because of the danger of a nuclear exchange in a future Indo-Pakistani war.[6] The United States should change course in South Asia before it is too late and India and Pakistan slide into nuclear use by accident or miscalculation. A nuclear war in South Asia would be a tragedy not only for the subcontinent, but also for the whole world.

Third, even from a narrow US national security perspective the denuclearization of South Asia is in the best interest of the United States. A central concept in most

6 According to a US National Intelligence Estimate, there was a 50-50 chance of the Kargil conflict of May-July 1999 escalating into an Indo-Pakistani nuclear exchange. See 'US Feared Pak-India Conflict Could Mushroom into Nuclear War', *Daw*n (Pakistan), 8 August 2000, http://www.dawn.com.

realist theory is that of the 'security dilemma' (Herz 1950, 157). If, as Mearsheimer (2001, 3) argues, 'All great powers are revisionist and primed for offence' it is hard to imagine why India would be an exception to this iron law of offensive realism, considering that some influential members of the Indian elite, such as Jaswant Singh, still perceive the United States as having hegemonic (or even neo-colonial) pretensions in India's larger neighbourhood.[7] As Mearsheimer (2001) notes, in an anarchic world, the security measures adopted by emergent global powers such as India present real threats to other global powers. The unfettered development of India's nuclear arsenal, potentially allowed by the US-India nuclear deal, arguably presents a potential real threat to American security. Therefore, even from a narrow US national security perspective the denuclearization of South Asia is in the best interest of the United States.

Despite the current Indo-American rapprochement and the rhetoric about a 'natural alliance' between the two countries, Jaswant Singh and other members of the Indian political elite are very much concerned about the possibility of giving up India's 'own strategic autonomy' by becoming 'an adjunct to the US national interests', thus losing 'a great deal of what it gained in May 1998' (Singh, Jaswant 2006, 378). Despite the current Indo-American rapprochement, Indian strategic analysts still remember when President Richard Nixon dispatched the nuclear-armed aircraft carrier *Enterprise* to the Bay of Bengal to buttress Pakistan in the 1971 war. The *Enterprise* incident is often cited as an example of why India should deploy a nuclear deterrent and the possibility of 'nuclear coercion' by a similar task force still enters India's strategic calculations (cf. e.g., Singh, Jasjit 2001). India is developing an intercontinental ballistic missile capability with important geo-strategic implications. In July 2006 India test-fired the nuclear capable missile Agni-3. Some experts believe that 'the United States would be the primary target of an Indian ICBM' (Speier 2006) and it is well-documented that India's 'civilian' space-launch programme is the incubator of India's ballistic missile military program. If India deploys a nuclear triad it would have the capability to threaten US naval activity in the Indian Ocean.[8] The American policy of doing nothing to constrain India's capacity and will to expand its nuclear arsenal and delivery systems is not good from an offensive realist perspective. Offensive realism raises serious doubts as to whether India would be really interested in balancing China rather than in maximizing its own power.

7 'Imperialism of the colonial variety is gone but its successor certainly lives, whether through United States' presence in Pakistan, NATO in Afghanistan, the Americans entangled in Iraq, Palestine, Lebanon, or now Iran' (Singh, Jaswant 2006, 377).

8 'Paul Kriesberg, a former Central Intelligence Agency operative in India, testified before an American Congressional committee that the Agni [a nuclear capable missile that can travel 2,500 km with a payload of at least 1,000 kg] posed a threat to US naval activity in the Indian Ocean'. See 'Agni may pose threat to US: Scholar', *Economic Times* [India], 6 May 1994. Quoted by Karnad (1999, 138).

On the other hand, it is in the best interest of the United States to roll back Pakistan's nuclear arsenal, considering that if Pakistan becomes a 'failed state' its nuclear weapons could fall in the hands of secessionist, or Islamic fundamentalist groups in the arc of instability from West and Central Asia to the Middle East and Northern Africa.[9]

The Bush I and Clinton Administrations: Abandoning Nuclear Rollback

During the Cold War, the United States failed to develop a coherent non-proliferation policy toward South Asia, and except for a brief period of time after the Sino-Indian war of 1962, it tilted toward Pakistan, subordinating US non-proliferation objectives to the global strategic interest of containing Soviet expansionism. This is shown by the Carter administration's drastic shift from suspending economic and military assistance to Pakistan under the Symington amendment in 1977 and in the Spring of 1979 to offering Pakistan after the Soviet invasion of Afghanistan, in December of the same year, a $400 million package of military and economic assistance that the Zia regime scornfully rejected as 'peanuts'.

The Reagan administration (1981–1988) transformed Pakistan into a 'front line state' in its struggle against the Soviet Union. Despite the Reagan policy of using arms transfers to dissuade Islamabad from pursuing a nuclear arms policy, by 1984 Pakistan had reached the threshold of a nuclear weapons capability. The Kahuta enrichment facility was then partly completed and was producing some small quantity of weapons-grade uranium. By January 1987 it was estimated that Pakistan had enough highly enriched uranium to produce two or three nuclear weapons.

The Bush I administration (1989–1993) continued the 'blind eye' policy of the Reagan administration toward Pakistan. Despite overwhelming evidence of Pakistan's nuclear weapons program, in late 1989 President Bush certified that Pakistan still 'did not possess a nuclear explosive device' (Spector and Smith 1990, 89). Only in 1990 Bush declined to make the certification required by the Pressler Amendment, and ended economic aid and US military sales to Pakistan.

In May 1990 Bush was forced to pay attention to South Asia when India and Pakistan came very close to a conventional military conflict over control of the state of Kashmir that had the potential to evolve into a nuclear confrontation. The crisis began when India accused Pakistan of actively supporting a Muslim insurgency in Kashmir. Facing reports that Pakistan had placed its nuclear weapons and F-16 aircraft on alert, Bush sent deputy national security adviser Robert M. Gates to negotiate a resolution of the crisis (Hersh 1993). Jaswant Singh, Indian envoy to Washington after the May 1998 nuclear tests, claims that in May 1990 the United

9 For a good summary of the domestic potential for Pakistan's disintegration along ethnic lines, see 'A Capacity to Scare: Is Pakistan Living at the Edge of Disaster?' in Unger (1999). See also Kaplan (2000).

States was 'under a completely faulty belief that India and Pakistan were on the verge of a war that could develop into a nuclear exchange' (Singh, Jaswant 2006, 115). The Indian political elite engaged in a similar exercise of self-denial during the Kargil crisis of 1999.[10] Most nonproliferation experts agree that the 1990 crisis could have escalated to a nuclear confrontation (see e.g., Chari et al. 2007).

After the Kashmir crisis of 1990 the Bush administration abandoned its previous insistence that both India and Pakistan sign the NPT and moved toward an acceptance of the nuclear status quo in the subcontinent. Now the United States would favour attempts to 'cap' the production of weapons-grade fissile material in India and Pakistan. This strategy had been proposed by a number of leading scholars during 1991 and 1992 (see e.g., Perkovich 1993; Asia Society Study Group 1995, 15–18).

Nuclear non-proliferation was a top foreign policy priority for the Clinton administration, which reversed more than a decade of opposition to a universal Comprehensive Test Ban and endorsed the long-neglected proposal for a global ban on the production of fissile material for nuclear weapons. In 1993 the State Department announced that Clinton's non-proliferation policy toward South Asia would focus on 'capping, then over time, reducing, and finally eliminating' the possession of weapons of mass destruction and their means of delivery from the region (US State Department 1993, 2). This policy was very different from the tougher counterproliferation strategy followed by Clinton against Iraq, North Korea, and Iran. If successful, the 'capping strategy' would have drawn India and Pakistan into the non-proliferation regime, by opening all their sensitive nuclear facilities to international inspections. On the other hand, this policy weakened the final goal of total nuclear rollback and implicitly legitimized India's and Pakistan's status as *de facto* nuclear weapon states, since under a bilateral or multilateral fissile material cut-off treaty nuclear material previously produced by both countries would not be subject to IAEA safeguards (Gordon 1994, 662–73; Reiss 1995, 202–6; Perkovich 1999, 340–46).

The May 1998 Nuclear Tests

The Indian nuclear tests of May 1998 took the Clinton administration and the whole world absolutely by surprise. The CIA failed to detect preparations for the tests; top officials learned of the tests from the media, and were very upset by the fact that their Indian counterparts did not give them advance warning of the tests. At the time, the Clinton team was taking the first steps to engage India in a 'strategic dialogue' (Perkovich 1999, 402, 417). Some voices in the US Senate called for the United States 'to compel India to roll back its nuclear program completely' (Perkovich 1999, 420). However, the Clinton administration quickly

10 Interview with Bruce Riedel, former Clinton administration official, Washington DC, September 2008.

abandoned its initial tough posture (based on Security Council Resolution 1172) that India and Pakistan should *unconditionally* sign the CTBT as a *precondition* for resuming diplomacy with them and decided to engage India and Pakistan in a series of 'nuclear dialogues'.

This 'realist' response to the post-tests situation in South Asia was supported by influential elements of the American academic and policy-making community. In 1997 an Independent Task Force organized by the Council on Foreign Relations argued that nuclear rollback was not 'a realistic near-term goal' for US policy toward South Asia. 'Despite US non-proliferation efforts, both India and Pakistan [had] become de facto nuclear weapons-capable states', and it was 'extremely unlikely' that they would change course (Haas and Rose 1997, 2). Therefore, it proposed a closer strategic relationship with India, because 'a strong and friendly India could play a key role in helping maintain stability and economic growth across Asia' (Haas and Rose 1997, 35).

A serious drawback of this policy was that it would alienate Pakistan, making much more difficult a peaceful settlement of the Kashmir dispute. Yet the Independent Task Force advised the Clinton administration to help establish 'a more stable plateau for Indo-Pakistani nuclear competition', in order to prevent 'further destabilizing developments' (Haas and Rose 1997, 3, 30, 34). After the May 1998 nuclear tests, this strategy was basically endorsed by deputy Secretary of State Strobe Talbott, President Clinton's special envoy to South Asia, on the assumption that 'existential' deterrence could still work in South Asia (Talbott 1999, 118–20) and the two countries would refrain from starting a conventional conflict for fear of escalation to a nuclear exchange. Since the Indian government was 'looking for a position at the more moderate end of the spectrum' (minimum nuclear deterrence) Talbott argued that Pakistan would be amenable to the same concept, considering its strategic disadvantage *vis-à-vis* India (Talbott 1999, 119).

Could Economic Sanctions Have Been More Effective?

On 18 June 1998 the Clinton administration imposed several economic sanctions on India and Pakistan, including a ban on exports of dual-use items and a termination of US government credits and investment guarantees (Morrow and Carriere 1999). The sanctions were expected to 'create a disincentive for other states to exercise the nuclear option if they [were] contemplating it' (Talbott 1998. 4). According to Talbott, the purpose of sanctions was not to 'engage in punishment for its own sake', but 'to persuade both of these governments to take the steps that... will bring India and Pakistan into accord with broadly accepted international norms [on non-proliferation]' (US State Department 1998; Talbott 1998, 4). However, economic sanctions failed to achieve this objective. On the contrary, India and Pakistan became more unyielding in their efforts to build minimum nuclear

deterrents. Although economic sanctions hurt both economies, they proved largely ineffective in preventing a nuclear and missile race.

Some analysts believe that neither the threat of economic sanctions nor sanctions themselves can effectively compel meaningful changes in the behaviour of other states (see e.g., Pape 1997).[11] The use of sanctions as a foreign policy instrument acquired a bad reputation in the foreign policy community in the 1990s. The inability of the Clinton administration to achieve its foreign policy goals *vis-à-vis* Iraq by the use of sanctions is often used as an example. Yet there are counter-examples, such as Qaddaffi's decision–after a protracted dispute with the United States and the United Kingdom–to turn in to an international court the two Libyan suspects of the bombing of a Panam flight at Lockerbie, Scotland, in 1988.

The most important issue is '*when* do economic sanctions work best?' (Blanchard and Ripsman 1999/2000). Arguably, post-test sanctions against India and Pakistan were not sustained *long enough* to become effective. By the end of 1998 the United States had lifted most of them, sending the South Asian rivals the message that Washington was ready to accept the nuclear status quo in South Asia. Morrow and Carriere (1999, 10–14) show that despite their short time-span economic sanctions *did* negatively affect private capital flows to India and Pakistan, especially in the aftermath of the nuclear tests. The sanctions badly hurt Pakistan's economy, much more than India's (Morrow and Carriere 1999, 10). This helps explain the Musharraf regime's declared willingness to sign the CTBT in 1999 and 2000 (despite domestic opposition from pro-bomb ideologues) regardless of India's position on the treaty.

Economic sanctions are more likely to work when they are part of a multilateral effort (see e.g., Mastanduno 1999–2000, 296)[12] and when the sender state (in this case, the United States) uses economic sanctions as part of a broader strategy to achieve certain objectives. By that measure, US economic sanctions against India and Pakistan were a failure. Unlike US economic sanctions against Serbia, which 'provided a valuable bargaining chip in separating Milosevic from the Bosnian Serbs and prodding him to accept the accords' (see Stedman 1998, 187), in the Indian case US diplomacy did not use sanctions as a bargaining tool. After several rounds of 'nuclear dialogues' with India, US representative Strobe Talbott declared in March 2000 that the Indian government would 'never' give up nuclear weapons.[13] The United States too quickly recognized India's 'need'

11 Scholars are divided on the effectiveness of economic sanctions. A summary of the literature appears in Baldwin (1999/2000). Several case studies show that economic sanctions *do* work under specific circumstances. See e.g., Rowe (1999–2000).

12 US economic sanctions against India and Pakistan were part of a broader international effort. Fourteen countries, including Japan and Germany, suspended bilateral aid programs to both countries, and the World Bank decided to delay indefinitely a decision on $865 million worth of loans to India. See Morrow and Carriere (1999, 5).

13 'India Will Never Give Up N-Option: Talbott', *Times of India*, 15 March 2000.

for a minimum nuclear deterrent instead of pursuing alternative courses of action, such as a diplomatic threat of *tougher* economic sanctions. The reason for such a weak approach to the nuclear dialogues was the unresolved tension between two conflicting US policy objectives: using non-proliferation as the cornerstone of US policy toward South Asia while moving toward broad-based Indo-US relations. In the end, the 'strategic dialogue' prevailed and non-proliferation was subordinated to other US interests and goals.

India and Pakistan will not renounce their nuclear weapons capability unless the United States forcefully persuades them to do so as part of a non-discriminatory, time-bound, and verifiable, global nuclear disarmament convention. Yet by lifting most economic sanctions against India without demanding CTBT ratification the Clinton administration delegitimized the CTBT as a non-proliferation norm, already weakened by the US Senate's refusal to sign the Treaty in the fall of 1999.

The Singh-Talbott Nuclear Dialogues: Washington Begins to Accept a Nuclear India

Between June 1998 and June 2000, the United States and India held ten rounds of 'nuclear dialogues'. As Perkovich (1999, 436) points out, 'both recognized that the tests had reinstated nuclear issues as the major obstacle that had to be negotiated before bilateral relations could move forward again'. The issues under consideration in the Talbott-Singh talks were designed as 'benchmarks'. They were embodied in UN Security Council Resolution 1172 of 6 June 1998, and required India and Pakistan: (1) to conduct no further nuclear tests, (2) to sign and ratify the Comprehensive Test Ban Treaty (CTBT), (3) to halt the production of fissile material for nuclear weapons, (4) to participate constructively in negotiations towards a Fissile Material Cut-off Treaty (FMCT), (5) to refrain from deploying nuclear weapons or missile systems, (6) to resume a direct dialogue to address the Kashmir dispute, (7) to strengthen export controls of nuclear materials (see Chari 1999; Mistry 1999). Washington held parallel rounds of talks with Pakistan, that were suspended in February 1999, unnecessarily irritating Pakistan by giving the impression that India was a privileged partner.[14]

As it turned out, this policy was wrong and self-defeating from a non-proliferation perspective. Most of the benchmarks became unattainable, and India gained time to extract concessions, giving very little in return. The tone of the negotiations was best summarized by Jasjit Singh, an adviser of the BJP government:

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14 The nuclear talks between the United States and Pakistan only resumed in June 2000. See 'Pak Blasts US on Sanctions, Says N-Talks Fruitful', *Times of India*, 17 June 2000, http://www.timesofindia.com.

> The Americans should not waste time telling us to get rid of nuclear weapons. That decision has been made. The issue now is what kind of nuclear power we are going to be. (Quoted in Burns 1998).

Once this was accepted by the American side, the subsequent negotiations were limited to discussing the nature of India's 'credible minimum nuclear deterrent'. American diplomacy focused on four areas:

1. a bilateral agreement to freeze the production of weapons grade fissile material;
2. accession to the CTBT;
3. restraint in the development and deployment of missiles and aircraft capable of carrying nuclear weapons, and
4. Indo-Pakistani dialogue over the Kashmir dispute.

It was very difficult to achieve progress in any of these areas, despite Jaswant Singh's claim in the second round of talks that India would join the CTBT through an 'incremental process' (see Perkovich 1999, 437). Although India and Pakistan agreed to participate in the Geneva negotiations on a Fissile Material Cut-off treaty (FMCT) they *did not* agree to freeze their fissile material production (Mistry 1999, 767).[15] The United States should have maintained the economic sanctions in the absence of positive movement in this area.

Time was on India's side: the longer and more protracted the talks with the United States the more likely India's new status as a 'nuclear power' to become a fait accompli. As Morrow and Carriere (1998, 10) note, 'The sanctions [on India] would have had greater effect if they had remained in place for several years and thereby affected significantly not just the commitments but also the disbursements of official creditors such as the World Bank'. Morrow and Carriere also point out that the sanctions on India 'had a marginal—but not negligible—effect on the country's economy. The indirect effects via private capital flows were far more important than the direct effects of changes in official aid flows' (Morrow and Carriere 1998, 10). However, the steady erosion of support for sanctions in the US Congress and the effective lobbying of the US-India Political Action Committee (US-INPAC) for the progressive lifting of sanctions made it increasingly difficult for Talbott and his team to extract concessions from their Indian counterparts (see Talbott 2006, 149).[16] The rush in the US Congress to lift sanctions six months after

15 On the FMCT negotiations, see Bunn (1998).

16 On the pro-Indian lobby in the US Congress, see 'South Asia in the Congressional Mindset' in Hathaway (2000, 9–10). Wirsing (2003, 88) argues that the Clinton administration crafted the economic sanctions on India and Pakistan to soften their impact: 'There were—very early in the game—clear grounds for skepticism about the likelihood that the sanctions would ever be applied forcefully enough or remain in place long enough to prove sufficient to push India and Pakistan into serious discussions over anything, including Kashmir'.

they were announced gave India enough 'breathing space' to play a strategy of 'soft stonewalling' successfully.

At the end of the day, India got the best of all possible worlds: the bomb and the progressive lifting of US sanctions. Instead of increasing the weight of sanctions to achieve its non-proliferation goals the United States had selectively lifted sanctions hoping to win concessions from both India and Pakistan. Yet despite promising in September 1998 to sign the CTBT, neither India nor Pakistan had signed the treaty by September 1999. In the case of India, because after losing a vote of non-confidence in the Lok Sabha in March 1999 the BJP became a caretaker government, unable to make lasting foreign policy commitments. A stronger BJP coalition, elected in October 1999, reiterated the promise to sign the CTBT, but in the meantime, the US Senate rejected the CTBT and the United States lost leverage to press India to make good on this promise.[17]

Before the 11 September 2001 terrorist attacks, nuclear non-proliferation was still a foreign policy priority in US policy toward South Asia. Yet India and Pakistan were rewarded with the lifting of most economic sanctions, despite the lack of progress in implementing the four US-proposed non-proliferation benchmarks put forward after the May 1998 nuclear tests. At the beginning of the George W. Bush administration, in January 2001, the United States had got very little (except in the area of export controls) in exchange for the elimination of most sanctions. After the 11 September 2001 terrorist attacks, the Bush administration waived all nuclear-related sanctions against India and Pakistan under the Glenn, Symington, and Pressler amendments (Perlez 2001).

As it became clear that India and Pakistan would not make major concessions in the Singh-Talbott talks, some analysts argued that India and Pakistan should be allowed to join the nuclear club as nuclear weapon states: 'Joining the club means abiding by the rules of non-proliferation which include the non-transfer of sensitive technologies, seeking to prevent the spread of nuclear and missile capabilities, and working towards disarmament' (Gupta 1999, 327). The argument was that India and Pakistan had shown 'some restraint', by not exporting nuclear technologies to other countries. After the 1998 tests, India expected to be recognized as a nuclear weapon state and to be invited to join an enlarged UN Security Council as a permanent member. India was rebuffed by the 'Big Five', which strongly condemned the tests in the Joint Communiqué of 4 June 1998. Yet after President Clinton's visit to India in March 2000, US Ambassador to India Richard Celeste said the United States would consider supporting the proposal that India become a permanent member of the Security Council.[18] The Clinton policy had allowed

17 Vice President Al Gore told Indian Prime Minister Vajpayee during a visit to Washington that 'as president he would make passage of the CTBT his first foreign policy initiative in Congress, and he urged India to adopt the treaty as well' (Sanger and Seelye 2000).

18 See 'US Ready to Back India's Bid in UNSC Seat: Envoy', *The News International* (Pakistan), 10 April 2000, http://www.jang.com.pk/thenews.

India (and to a lesser extent, Pakistan) to 'set a foot in the doorway' before full admission to the nuclear club.

Explaining the Failure of US Policy

The failure of US non-proliferation policy toward South Asia arises from the unresolved dilemma between a security-oriented strategy of living in a 'nuclear-armed crowd' while 'managing' nuclear proliferation or decisively moving towards nuclear disarmament (see Graham and Shaw 1998, 70; Schell 2000, 23). As Sagan (1997, 156) points out, the first strategy 'will eventually create strong tensions with a norms-oriented strategy seeking to delegitimize nuclear weapons use and acquisition'.

In the first half of the 1990s, despite the end of the Cold War, the United States continued basing its nuclear strategy on nuclear deterrence, missing a historical opportunity to delegitimize nuclear weapons at a time in which nuclear rollback was the dominant trend (Argentina/Brazil, 1991; South Africa, 1991; Ukraine, Kazakhstan, and Belarus, 1993/94) and it was possible to start meaningful negotiations toward nuclear disarmament (as required by article VI of the NPT) among the five declared nuclear weapon states. The United States could have done more to move forward toward global nuclear disarmament for several reasons. The end of the cold war created an extraordinary opportunity for drastically reducing the Russian and American nuclear arsenals. The enormous economic sacrifice and significant environmental damage associated with nuclear weapons production were powerful arguments for nuclear disarmament. Nuclear weapons were losing legitimacy as a currency of power in international affairs. The end of the cold war reinforced an antinuclear taboo that had gained strength since 1945 (see Tannenwald 2007). That thirty thousand nuclear weapons could not preserve the Soviet Union raised new questions about the value of nuclear weapons. After several cases of nuclear rollback, India, Israel, and Pakistan appeared increasingly isolated in the context of non-proliferation and disarmament debates. The declared nuclear weapon states had powerful incentives to move toward denuclearization: (1) the economic costs of keeping a nuclear arsenal and the diminishing role of nuclear weapons in providing for their national security; (2) the danger of nuclear accidents and unauthorized launches, (3) the danger of nuclear terrorism, (4) the risk of nuclear use, with devastating consequences for the nuclear weapon states themselves.[19] Denuclearization acquired an unprecedented legitimacy among members of the academic and policy-making security establishment (Baylis and O'Neill 2000, 2). After President Bush's unilateral nuclear disarmament measures in 1991, President Mitterand of France called for a summit of the 'Big Five' to

19 A good summary of these dangers appears in Goodpaster Committee (1997). See also the Statement on Nuclear Weapons (1996) issued by 61 retired generals and admirals from 17 countries, including 19 from the United States.

discuss the future of nuclear weapons in the world. The new mood was summarized by Paul Nitze, former arms control negotiator and ambassador-at-large during the Reagan administration: 'Is It Time to Junk Our Nukes?' (Nitze 1994).

However, the United States negotiated START I and START II under the straitjacket of nuclear deterrence theory, unable (or unwilling) to move decisively toward nuclear disarmament. Consequently, US non-proliferation efforts were undermined by a double standard: 'do as I say, not as I do'. Nuclear deterrence was reaffirmed as the official US strategic doctrine during the Clinton administration (1993–2001) and it was still the official US doctrine during the George W. Bush administration (2001–2009) even though George W. Bush appeared to be moving from a deterrence-only policy to a policy that would combine nuclear deterrence and a National Missile Defence (NMD). Nuclear deterrence is attractive to the average US politician because it is deeply imbedded in an American strategic culture for which nuclear weapons have high political value and because despite the end of the Cold War the doctrine of nuclear deterrence has managed to deter debate about itself (see Schell 1982, 204). Since nuclear weapons could not be disinvented, nuclear deterrence was sold by strategic experts to the politicians (and to a lesser extent, to the public) as the best alternative to nuclear disarmament (see Sims 1996).

More than a decade after the end of the Cold War, the US government is still strongly committed to nuclear deterrence. Possible explanations are:

- *Nuclearism*, the cult of the bomb, is deeply ingrained among American political and military elites;
- The power and influence of the military-industrial complex in nuclear decision making;
- The symbolic value of nuclear weapons, which may lack military utility, but have 'great political utility' (Jervis 1989, 176);
- The inability of the American anti-nuclear movement to articulate a politically feasible alternative nuclear future and to educate public opinion about the benefits of nuclear abolition and the drawbacks of keeping nuclear weapons indefinitely;
- The American preoccupation with the danger of cheating or breakout after signing a nuclear disarmament agreement, which may be explained by the 'unique historical experience of being the sole country to possess nuclear weapons' from 1945 to 1949 (Schell 1998, 70);
- The 'traditionalist' realist claim that nuclear weapons are needed to deter biological, chemical, and nuclear weapons attacks from 'rogue' states (see e.g., Wirtz 1998, 137).

The persistence of nuclear deterrence thinking among US policy elites in the 1990s helps explain the rather quick acceptance on the part of the United States of India's and Pakistan's nuclear weapons status. After the resolution of the Kashmir crisis in the spring of 1990, several US and Indian scholars argued

that non-weaponized deterrence (NWD) was at work in South Asia (see e.g., Hagerty 1995/96; Sundarji 1995, 127). The argument was that the ability of India and Pakistan to assemble and deploy nuclear weapons on short notice deterred both countries from fighting a conventional war, for fear of nuclear escalation. Since NWD kept the peace, the Bush I administration abandoned nuclear rollback for the 'capping strategy' (see Gordon 1994, 662–63). This optimistic approach ignored the fact that—as I have shown in Chapter 2—in certain war-games scenarios NWD was *very* unstable. Uncertainty about the other side's capability to deploy nuclear weapons quickly in a crisis created incentives for an *early use* of undeclared *tactical* nuclear weapons as a counterforce measure. Moreover, during the Brasstacks (1987) and 1990 (Kashmir) crises India was deterred from invading Pakistan not by the mere 'existence' of Pakistan's unassembled nuclear weapons, but by explicit Pakistani threats *to use them* if India made a military move against it. During the Brasstacks crisis, Pakistan conveyed an *express* nuclear threat to the Indian government when Indian Ambassador S.K. Singh was summoned to the Foreign Office in Islamabad 'one midnight in January 1987': 'There the Minister of State for Foreign Affairs, Zain Noorani, just back from a meeting with President Zia said he had been authorized to convey a message: if India took any action not conducive to its sovereignty and territorial integrity, then Pakistan was ''capable of inflicting unacceptable damage'' on it.... When asked whether this implied an attack on Bombay, the Pakistani Minister replied that it might be so' (Kargil Review Committee 2000, 191).

Despite its shortcomings, NWD was endorsed by a number of academics and think tanks, both in the United States and South Asia. For example, Hagerty (1998, 194) argued that the fact that India (since 1974) and Pakistan had refrained from testing nuclear weapons was an important proof of nuclear restraint, that 'inhibit[ed] a variety of nuclear related activities, including the miniaturization of nuclear warheads for mating with ballistic missiles and the development of thermonuclear weapons'. Yet as early as 1996 both countries were precisely embarked in the kinds of activities that NWD was supposed to restrain.[20] These activities and the missile race have greatly expanded after the nuclear tests of May 1998, which showed the bankruptcy of the 'capping strategy' pursued by the Bush I and Clinton administrations.

The central tenet of proliferation optimism is that 'the chief impact of nuclear weapons is to deter war between their possessors', and that existential deterrence can keep the peace in regional conflict situations, because the danger of retaliation by even a small number of nuclear weapons outweighs any possible benefit of a military attack (Waltz 1981; Hagerty 1995/96, 114).

After the May 1998 nuclear tests, proliferation optimists argued that the minimum deterrence policy advocated by the moderate wing of the BJP in India would keep the peace in the subcontinent (see e.g., Talbott 1999, 119). Despite the

20 Leonard Spector, Director of the Non-Proliferation Project, Carnegie Endowment for International Peace, telephone conversation with author, May 1996.

failure of US policy to prevent the tests, the Clinton administration believed that since India and Pakistan had not gone to war it was still possible to stabilize the Indo-Pakistani nuclear competition using existential deterrence. However, in late 1998 the Indian Army chief, General V.P. Malik, claimed that conventional war remained a possibility after the tests.[21]

The Kargil war between India and Pakistan (see Chapter 4) showed that existential nuclear deterrence was not a sound guarantee of war avoidance and that nuclear weapons would not bring stability to South Asia. After Kargil, the Indian government made pronouncements about India's willingness to fight a 'limited war' (see Raghavan 2000). There are several reports that Pakistan threatened the use of nuclear weapons during the Kargil war (see e.g., Baruah 1999; Kampani 1999, 3; Cirincione 2000, 127; Miller and Risen 2000). A second Kargil would dramatically increase the possibility of an all-out conventional war that could escalate to the nuclear level.

There are formidable obstacles to establish stable nuclear deterrence in South Asia (Joeck 1997; Bajpai 1999; Bowen and Wolven 1999; Gregory 1999). First, as we have seen in Chapter 3, geographic proximity, combined with inadequate early warning systems is a source of deterrence instability.[22] Second, even if India and Pakistan can each discourage the other side from a pre-emptive military attack by dispersing their ballistic missiles they would still face formidable command and control challenges.[23] Third, if India wants to deploy a credible nuclear deterrent it will have to complete the development and deployment of its Agni missiles, in order to achieve threshold deterrence against China. Nevertheless, such a deployment will only activate a missile race in South Asia, without guaranteeing deterrence stability. Finally, India and Pakistan have misperceived each other's intentions in the past; the misperception of how tightly controlled the enemy's forces are could produce a nuclear exchange in a future crisis.

De-hyphenation: Overcoming the Zero-Sum Game?

The George W. Bush administration almost explicitly recognized India and Pakistan as nuclear weapon states, completely abandoning any pretense of having a non-proliferation policy toward South Asia. This was a major departure from the Clinton administration policy even if the Clinton team began the process of subordinating US non-proliferation policy toward South Asia to other foreign policy goals, such as a rapprochement with India as an emerging great power. Yet non-proliferation hawks still had a voice in the Clinton administration, and Secretary of State Madeleine Albright still conveyed the Indian delegation during

21 Quoted by Najam Mushtaq, 'The Deterrence Enigma', *The News* (Pakistan), 17 February 1999.

22 See Chapter 3, p. 65–66.

23 See Chapter 3, p. 67–68.

the Talbott/Singh talks that they would not easily obtain a free pass to develop nuclear weapons from the Clinton administration. The Clinton team hoped that the four unaccomplished 'benchmarks' that guided the failed Talbott/Singh talks 'would remain the basis of American policy into the future' (Talbott 2006, 227). Yet the Bush administration decided that pushing India to implement the Clinton administration's non-proliferation benchmarks would become an obstacle to achieve a strategic partnership with India, and sought to resolve the long-standing dispute with India on non-proliferation (that goes back to India's nuclear test of May 1974) with the US-India nuclear deal and a recognition of 'India's exceptionalism' (Mohan 2008, 143). As a result, the Bush administration moved US policy toward South Asia from non-proliferation to post-proliferation. After the 9/11 terrorist attacks, Pakistan became an indispensable ally in the US-led global 'War on Terror' and the Bush administration decided to deliver a number of F-16 fighter aircraft which had been prevented by the Pressler Amendment, while resuming the sale of this weapon to Islamabad.[24] On the other hand, the US-India nuclear deal, approved by the US Congress in September 2008, exempts India from the restrictions imposed by the Nuclear Non-Proliferation Act (NNPA) of 1978 for the sale of nuclear fuel to non-NPT parties. If nuclear non-proliferation is defined as *preventing* the spread of nuclear weapons with the ultimate goal of their total elimination (this is the definition embodied in the NPT) both decisions—made by the Bush administration in 2005 and 2006–2007—marked the end of US non-proliferation policy toward South Asia.[25]

As we have seen, in 1993 there was a major shift in US non-proliferation policy toward South Asia when the Clinton administration decided to abandon the previous insistence on denuclearization and adherence to the Non-Proliferation Treaty (NPT) as the fundamental goal of US policy in favour of the more modest goal of 'capping' the production of fissile materials in India and Pakistan. Yet it was still possible to move from the 'capping strategy' to nuclear roll-back in South Asia, especially if there was progress in the global nuclear arms control and disarmament agenda. The abandonment of *any* non-proliferation goals toward South Asia (except for export controls) has limited US post-proliferation policy to (1) damage limitation, as in the failed attempt—during the US-India nuclear deal negotiations—to obtain a binding Indian commitment not to carry out further nuclear tests, and (2) guaranteeing the safety and security of Pakistan's nuclear

24 See 'Pakistan, India Get Green Light to Buy US Fighter Jets', *Arms Control Today News Update*, 18 April 2005, 2.

25 In his testimony to the House Committee on International Relations, Ashley Tellis adopts a curious definition of nuclear non-proliferation when he argues that the US-India nuclear deal of July 2005/March 2006 recognizes the 'impeccable' record of India in 'assisting the United States in reducing proliferation worldwide' with 'rigorous export controls'. Yet non-proliferation experts have argued that India's record in export controls is not so perfect. See Albright and Basu (2006). Moreover, the combination of not signing the NPT and testing nuclear weapons makes of India a textbook case of nuclear proliferator.

arsenal, preventing the seizure of Pakistan's nuclear assets by radical groups or individuals (see Luongo and Salik 2007) and precluding those assets from falling into the hands of Islamic terrorists in the event of an Islamist takeover of the Pakistani government (see Hersh 2001).

Some scholars argue that the US-India nuclear deal gives the United States leverage to demand binding non-proliferation commitments from India, such as signing and ratifying the CTBT (one of the Clinton administration's benchmarks) especially if the US Senate ratifies the treaty.[26] However, the way in which the nuclear deal was negotiated deprives the United States of leverage, because the Indians have become accustomed to obtaining concessions from their American counterparts without making concessions in return. After the Talbott/Singh 'nuclear dialogues' and the protracted US-India nuclear deal negotiations in 2005-2008, India has learned that it can always 'wait' during bilateral negotiations with the United States because time is on its side. This unfortunate outcome is the direct consequence of a purposeful negotiating strategy on the part of the United States. For the Bush administration, it was so important to establish a lasting strategic partnership with India in order to 'contain' China that it decided to help India to become a great power 'without an expectation of immediate returns and automatic reciprocity' (Mohan 2008, 144). This is at best short-sighted and at worst dangerous, because in an anarchic world great powers seek to realize their own interests. Indian national interests may converge with US national interests in areas such as the 'war on terror'; but they may also significantly diverge; India's policy toward China (or Iran) does not necessarily converge with US policy. 'Containing China' is a non-starter as a rationale for a US-India strategic partnership. India highly values the strategic autonomy gained by becoming a nuclear weapons state and for a number of reasons it is unlikely to agree to become the junior partner of the United States in order to 'contain' the rise of China.

The Bush administration not only stopped harassing India about its nuclear weapons programme; it implicitly encouraged India to pursue its nuclear weapons programme in earnest, as part of the US goal to help India to become a great power. As a rising power India is a very important country and the United States will need India's cooperation in the twenty-first century to deal with a variety of global issues, from environmental degradation to the 'war on terror'. Yet there is no need to give India a free pass to produce an unlimited number of nuclear weapons to obtain its cooperation in the 'war on terror'. Many other countries face the same threat of Islamic fundamentalism (Argentina was attacked twice by Islamic terrorism in the 1990s) and they cooperate with the United States in the war on terror as friendly *non*-nuclear weapon states.

The centrepiece of the Bush administration's new game plan toward South Asia is the idea of having US relations with India and Pakistan stand on their own without being linked; what has come to be known as the de-hyphenation of US

26 Interview with Bruce Riedel, Senior Fellow, Brookings Institution, Washington, DC, September 2008.

policy toward the subcontinent. Dehyphenation can be defined as the simultaneous improvement of US relations with India and Pakistan, while pursuing independent strategies toward both countries, in order to advance 'both bilateral relationships on their individual merits' (Mohan 2008, 145).

During the Cold War, the major obstacle for an enduring friendly relationship between the United States and India was the US tendency to tilt toward Pakistan as an indispensable ally in the global confrontation with the Soviet Union. The lowest point in the relationship occurred during the third Indo-Pakistani war, in December 1971, when the Nixon administration sent the nuclear-armed aircraft carrier Enterprise to the Bay of Bengal, threatening India. As Stephen P. Cohen (2001, 137) notes, 'The Enterprise episode revealed how quickly the United States could change its policies, one year supporting India against China and only a few years later supporting both China and Pakistan against India'.

The end of the Cold War in 1989–1990 opened up the possibility of redefining US relations with the South Asian rivals, 'delinking' one relationship from the other. While attractive, this goal is difficult to implement. The reason is simple. The Bush administration has repeatedly reassured New Delhi that its post-9/11 rapprochement with Pakistan would not hamper its new partnership with India. Yet New Delhi constantly watches how the United States deals with Pakistan and jealously compares it to how Washington deals with India.

Tellis (2008, 22) describes de-hyphenation as the successful implementation of a 2000 Rand Report that recommended President-elect George W. Bush, 'to pursue a differentiated policy toward [South Asia] centred on "a decoupling of India and Pakistan in US calculations"'. Tellis argues that 'the logic of dehyphenation' in this report had two merits:

> First, the recognition that India was a rising power and hence merited not only far greater attention than in the past but also a concentrated focus *unconnected to any issues involving Pakistan*; and second, a stipulation that Pakistan be recognized not as a peer of India but as an especially vulnerable entity that must be nursed back to health because its decay or failure would be detrimental to 'the peace of the region' (Tellis 2008, 24, italics added).

Tellis (2008, 21) celebrates de-hyphenation as a success story. However, US policy toward South Asia during the George W. Bush administration has been hardly a success. From an offensive realist perspective, it has been a disastrous failure, showing the inability of the George W. Bush administration to think strategically in the long term. Arguably, the US-India nuclear deal has been a strategic mistake because it ignores the offensive realist argument that the unfettered development of the Indian nuclear arsenal (potentially allowed by the nuclear deal) presents a real threat to US security. Tellis (2008, 27) argues that under George W. Bush, 'Washington… was able to pursue a differentiated policy toward the region that successfully advanced its own interests'. This is not necessarily the case, because for offensive realist reasons (see Mearsheimer 2001) India has a strong rationale to

confront the United States, even if it tactically accommodates it now. The United States has failed to prevent India and Pakistan from going nuclear, and the failure of US non-proliferation policy toward South Asia has been detrimental to peace in the region (and globally). According to the Rand Report quoted by Tellis,

> The continuing violence in Kashmir and the risk of a larger war between India and Pakistan—that might include the use of nuclear weapons now in the possession of both countries—have made this region (in President Clinton's words) 'the most dangerous place on earth' (Carlucci et al. 2001, 44–45).

If this is a *real* danger, how can the United States pursue a differentiated policy toward the region by 'de-coupling' India and Pakistan in US calculations?

As Talbott (2006, 85) notes,

> It was India's nuclear test, along with the totally predictable consequence of Pakistan's, that had refocused everyone on the extent to which the two countries' fates were, like it or not, interlocked. So the hyphen was not inserted between India and Pakistan by outsiders. Rather, the two countries put it there themselves. It symbolized the way they prosecuted their relentless and seemingly endless animosity.

Before the US tilt toward India in 2000, the Clinton administration in fact *hyphenated* US non-proliferation policy toward South Asia. Hyphenation was just a recognition of the fact that by becoming an undeclared, de facto nuclear weapon state in 1987, Pakistan (whether India liked it or not) *did* achieve virtual parity with India and a situation of 'non-weaponized deterrence' emerged in South Asia. Pakistan was now able to threaten first use of nuclear weapons if India began a conventional war by pursuing Kashmiri insurgents into Pakistani territory.

The gist of Tellis's argument is that 'India's possession of nuclear weaponry outside of the Nuclear Non-Proliferation Treaty (NPT) framework had previously made any meaningful cooperation between the United States and India impossible' (Tellis 2008, 30). Therefore, in order to develop a 'strategic partnership' with India it was necessary to remove the question of India's nuclear weapon status from the bilateral relationship. This policy was first pursued by announcing the Next Steps in Strategic Partnership (NSSP) agreement in January 2004 and then by negotiating the nuclear deal with India in 2005–2008. Yet by ignoring India's possession of nuclear weapons the Bush administration not only made a strategic mistake; it also undermined (and began to unravel) the International Nuclear Order (INO) and its linchpin the Nuclear Non-Proliferation Treaty (NPT), opening up the possibility of a new International Nuclear Order based on the distinction between 'good' and 'bad' proliferators. If the NPT-centred INO collapses, the alternative—in the absence of a new international non-proliferation regime—is nuclear anarchy (see Schell 2007).

Tellis (2008) celebrates dehyphenation as a major achievement of the Bush administration. Yet despite the post-9/11 'alliance of necessity' with Pakistan the United States has unequivocally tilted toward India while ignoring the urgent Indo-Pakistani issues that are crying for a prompt settlement, such as the Indo-Pakistani nuclear arms race and the Kashmir dispute.

Dehyphenation is a wrong, misguided policy for at least three reasons. First, it is impossible to think of the nuclear predicament in South Asia without hyphenating India-Pakistan nuclear relations. The question of crisis stability (see P.R. Chari et al. 2007) is important not only for South Asia's strategists (they are deeply divided over the issue) but also for US policy makers and it can only be addressed by hyphenating Indo-Pakistani nuclear relations. Second, dehyphenation is based on the premise that India as an emerging power must be dealt with differently. Yet developing 'an integrated and strategic view of the subcontinent' (Mohan 2008, 145) requires a balanced approach to India and Pakistan that can only be achieved by re-hyphenating US policy toward South Asia. 'India-Pakistan' is not a 'false equation' as Jaswant Singh would have us believe (quoted in Talbott 2006, 85). On the contrary, moving Indo-Pakistani relations (including nuclear relations) from conflict to cooperation is one of the keys to achieving a lasting peace in the region and re-energizing regional economic integration (the currently ineffective South Asian Association for Regional Cooperation (SAARC). Third, by privileging US-India relations to the detriment of US-Pakistan relations (that have deteriorated, even before the fall of the Musharraf regime in early 2008) dehyphenation prevents the United States from developing a truly comprehensive strategy to denuclearize the region; and increases the danger of nuclear terrorism, especially in Pakistan, where former President Musharraf's decision to declare a national emergency in November 2007 raised concerns about the safety and security of that country's nuclear arsenal (see e.g., the 'negative assessments' in Marchesano 2008). There is also a danger of nuclear terrorism in India, due to the larger number of nuclear facilities that are potential targets for the theft of weapon-grade fissile materials. Tellis (2008, 36) argues that 'the emphasis on dehyphenation has thus paid rich dividends. It has enabled the United States to advance a diverse variety of goals within the region and elsewhere without becoming hostage to the vicissitudes of Indian-Pakistani relations, while providing the permissive conditions for those bilateral relations to evolve peacefully'. Yet there was a major crisis between India and Pakistan during the George W. Bush administration (the 2002 border confrontation discussed in chapter four) and whether Indo-Pakistani relations are evolving peacefully since the start of the bilateral 'composite dialogue' in 2004 is an open question.

Some scholars argue that India and Pakistan have come close to settling the Kashmir dispute (see e.g., Noorani 2008); but others argue that the bilateral relationship is 'in free fall' (Bhadrakumar 2008; see also Bajoria 2008; Sengupta 2008). Tellis (2008, 36) claims that a variety of critical US policy choices toward both countries, including the refusal 'to constrain India's and Pakistan's strategic [nuclear weapon] programs', 'were always driven fundamentally by a judgment

about what objectively advanced US interests'. However, refusing to constrain both countries' nuclear weapons programs does *not* advance US interests because the more countries go nuclear the greater the danger of nuclear terrorism and the more difficult it is to move forward toward global nuclear disarmament, which is in the US interest (see Schultz et al., 2007; 2008). Arguably, the emphasis on de-hyphenation has paid 'rich dividends' for India, rather than for the United States. For Tellis (2008, 28) the 'logic' of de-hyphenation is that the United States 'must be less concerned with the India-Pakistani relationship or its own role in that relationship than with the quality of its distinctive bilateral ties with New Delhi and Islamabad'. He claims that the traditional US approach of 'managing the security interdependence' between India and Pakistan with the intent of reducing the threat of nuclear war' was wrong because it was exploited by Pakistan as a cover in its rivalry with India while annoying India, even if US interventions 'often proved ineffective in assisting Islamabad to secure its desired political goals' (Tellis 2008, 28–29). As a result, 'The traditional US approach managed to alienate India and Pakistan simultaneously, making the bilateral frictions between these two countries more difficult to resolve' (Tellis 2008, 29). However, as Fair (2004, 105) argues, 'The issue of Kashmir is and will likely remain the "hyphen" in US relations with India and Pakistan'. By ignoring this fact, the current US policy toward South Asia makes it impossible to resolve the India-Pakistan conflict because the 'tilt' toward India makes it impossible to force India to accept international mediation in a dispute that may be bilateral in nature (as India argues) but is not bilateral in its consequences, because of the danger of escalation of a conventional war between India and Pakistan to the nuclear level (see Chapters 3 and 4).

The about-face in US non-proliferation policy toward South Asia clearly appears in the contrast between the Clinton administration's reaction to the May 1998 nuclear tests and the Bush administration's decision to abandon all efforts at progress on Clinton's four non-proliferation benchmarks, while giving India a free pass into the nuclear club with the US-India nuclear deal of 2006–2008. For the Clinton administration, India, having made itself part of the problem of nuclear proliferation by testing nuclear weapons in May 1998, had to make itself part of the solution by joining the Comprehensive Test Ban Treaty (CTBT) and meeting the other three non-proliferation benchmarks (supporting a fissile material treaty, exercising strategic restraint, and meeting the highest standard of export controls) (see Talbott 2006, 86, 227). Yet by offering India a nuclear deal in July 2005, 'Bush gave clear notice of his judgment that India was part of the solution to nuclear proliferation rather than part of the problem' (Tellis (2008, 31). Yet how can India be part of the solution to nuclear proliferation without accepting any constraints on its nuclear weapon-related activities?

The US-India Nuclear Deal: A 'New Nuclear World Order'?

On December 18, 2006 President Bush signed the 'Henry Hyde United States-India Peaceful Atomic Energy Cooperation Act', which permits broad US civilian nuclear cooperation with India. This bill reverses thirty years of US non-proliferation policy toward South Asia. The scope and far-reaching implications of this deal is well summarized by Sokolski (2005), 'In essence, President Bush promised visiting Indian prime minister Manmohan Singh to treat India as if it were Great Britain or France—giving New Delhi open access to US and international nuclear fuel and reactors, advanced US nuclear technology, and the freedom to make as many nuclear weapons free from international inspection as it wants'. As Zia Mian and M.V. Ramana note, unless the spent fuel produced by India over the years (some 9,000 kg. of reactor-grade plutonium) in its unsafeguarded power reactors is put under IAEA safeguards—i.e., declared to be off-limits for military purposes as part of the US-India nuclear deal—'India would have enough plutonium from this source alone for an arsenal of approximately 1,100 weapons, larger than that of all the nuclear-weapons states except the United States and Russia' (Mian and Ramana 2005). The Singh government seems to be more interested in dealing with India's multiple domestic challenges (350 million Indians live below the international poverty line) than in embarking on a major nuclear arms build-up. Yet the production of fissile materials specifically for nuclear weapons is not constrained by the nuclear deal (see Bush and Singh 2005) and India has refused to place even part of the spent fuel already produced in its unsafeguarded power reactors under IAEA safeguards. The Singh government sees the nuclear deal as a way to sustain and expand the nuclear energy program, while not limiting the building of a 'credible minimum nuclear deterrent'. However, the 'Draft Report of the National Security Advisory Board on Indian Nuclear Doctrine' makes it clear that the 'minimum' number of nuclear weapons could increase, depending on 'the capability and the disposition of the nuclear forces maintained by India's adversaries, …and the state of political relations: between India and its immediate adversaries; between those adversaries themselves; and between India and other key powers in the global system' (Tellis 2003, 75). India is believed to have a stockpile of about 50 nuclear weapons, and it has produced enough weapon-grade plutonium for as many more. According to the Natural Resources Defense Council (2007, 74), 'A Ministry of Defense official told *Defense News* in late 2004 that India in the next five to seven years would have 300–400 fission and thermonuclear weapons distributed to air, sea, and land forces'.

The Bush administration secured very little in return for lifting the restrictions on nuclear trade with India, abandoning the requirement that in order to receive peaceful nuclear technology from the United States a country must accept full-scope safeguards in all its nuclear facilities.[27] The absence of limits on India's

27 See the US Nuclear Non-Proliferation Act (NNPA) of 1978. A good summary appears in Gardner (1994, 44–45).

ability to produce weapons-grade fissile material creates the danger of a nuclear arms race in South Asia, because China and Pakistan will probably increase their own stockpiles of fissile material to catch up with India.[28] As Kimball (2006) notes, 'Unrestricted or accelerated Indian fissile material and weapons production would make it more difficult for the United States to persuade Pakistan and China to slow or stop the growth of their fissile material and nuclear weapons stockpiles'. Moreover, the US-India nuclear deal undermines the US focus on technology denial to prevent nuclear weapons from falling into the hands of terrorist groups.

The 27 July 2007 US-Indian agreement for peaceful nuclear cooperation (approved by the US Congress and signed by President Bush in September 2008) commits the United States to guarantee the supply of nuclear fuel to India in the event that India suffers a disruption in supply and does not expressly determine that nuclear trade with India will be terminated in the event of an Indian nuclear test. Under US pressure, on 6 September 2008, the Nuclear Suppliers Group (NSG) approved a waiver allowing for nuclear trade with India without pre-conditions, based only on a non-binding statement by India's External Affairs Minister Pranab Mukherjee promising that India will continue a unilateral nuclear testing moratorium and negotiate with the International Atomic Energy Agency the 1997 Additional Protocol that strengthens IAEA safeguards. However, since the nuclear deal allows India to keep its unsafeguarded nuclear weapons program (under the so-called 'separation plan') such promise is largely symbolic.

The Indian government's unwillingness to join the 176 other countries that have signed the CTBT suggests a preference for an open-ended nuclear deterrent, which is guaranteed by the plan to separate India's civilian and military nuclear facilities signed by President Bush and Indian Prime Minister Manmohan Singh in New Delhi on 2 March 2006.

Some scholars argue that the major damage to non-proliferation goals that will result from the US-India nuclear deal can be limited, thus 'saving' the deal and the broader goal of 'strengthening relations with India and making it a strategic partner in the 21st century' (see e.g., Einhorn 2005/06). From this perspective, despite the absence of an Indian obligation to stop producing fissile material for nuclear weapons, IAEA safeguards on the 'civilian' part of India's nuclear program

28 China has made an effort to modernize its nuclear forces since the end of the Cold War: 'China plans by 2010 to have modernized its nuclear forces by developing a new generation of strategic and possibly substrategic weapons on various delivery platforms, deploying a new-generation nuclear ballistic missile submarine, and deploying more nuclear-powered submarines' (Cirincione et al. 2005, 167). As Perkovich (2005, 4) notes, the US-India nuclear deal may lead China 'to reciprocate by offering nuclear cooperation with Pakistan to keep up'. China already has a nuclear cooperation agreement with Pakistan, and the latter largely depends on Chinese assistance to build 13 new nuclear power plants in the next 25 years, as announced by the Pakistan Atomic Energy Commission (PAEC) on 14 July 2005. This high profile announcement was made in anticipation of the US-India nuclear deal.

will serve primarily a symbolic role in demonstrating India's commitment to non-proliferation. However, most nuclear experts believe that without India stopping production of fissile material for its nuclear weapons programs, nuclear assistance, particularly any in the areas involving the fuel cycle, will probably spill over to India's nuclear weapons program (see e.g., Kimball 2006; Mian 2006). The nuclear deal frees up India's domestic uranium for its nuclear weapons program, in clear violation of the US commitment under article I of the NPT 'not in any way to assist, encourage, or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons' (see SIPRI 1980, 43). Even if the Singh administration practices nuclear restraint, a future nationalist Indian government (e.g., if the Bharatiya Janata Party returns to power) could take advantage of the nuclear deal with the United States to use more domestic uranium (now available thanks to the supply of foreign nuclear fuel) to increase its stockpile of weapons grade fissile material available for nuclear weapons in order to build the 'maximum nuclear deterrent' advocated by the nuclear hawks (see Karnad 1999).

Defenders of the US-India nuclear deal argue that the NPT does not forbid the United States from providing civilian nuclear technology to non-signatories such as India, but this is a matter of interpretation, because article I of the NPT clearly refers to '*any* non-nuclear weapon State'. They also argue that India has a 'spotless' non-proliferation record, but it violated its non-proliferation commitments when it used nuclear materials from the Canadian provided, safeguarded CIRUS reactor to conduct the 1974 nuclear test. Indian firms have been sanctioned by US agencies for providing nuclear technology to Iran, and non-proliferation experts (see e.g., Albright and Basu 2006) have challenged the Bush administration's claim that India has an 'impeccable' non-proliferation record. Selig Harrison (2006) claims that India's acceptance of IAEA safeguards 'in perpetuity' is 'a major diplomatic achievement by US negotiators', but those safeguards will only apply to nuclear facilities, equipment and materials declared as civilian in its separation plan, not to the eight nuclear facilities that are part of its nuclear weapons program. As Squassoni (2008) notes, 'India apparently sees no obligation to apply safeguards in perpetuity to its indigenous reactors and has linked application of safeguards to fuel supply'. During the nuclear deal negotiations, India insisted that the United States commit itself to a continuing supply of nuclear fuel even if the New Delhi government conducts a nuclear test explosion or otherwise violates its non-proliferation commitments. Moreover, it has declared that it would have the right to suspend 'India-specific' safeguards if nuclear fuel supplies were disrupted for any reason (Boese 2006).

There is a fundamental difference between tacitly recognizing India as a nuclear weapon state—something that the Clinton administration already did after Clinton's visit to New Delhi in March 2000—and *aiding* its nuclear weapon ambitions. From this perspective, it makes a big difference whether the United States strongly opposes or tacitly leaves the door open for New Delhi to test again. Most non-proliferation experts agree that the US-India nuclear deal not only fails to place limits on India's nuclear weapons program, but it may indirectly contribute

to the growth of India's nuclear arsenal, while significantly damaging the Nuclear Non-Proliferation Treaty (NPT) regime.[29] The US-India nuclear deal undermines a rule-based non-proliferation regime, because Washington's acceptance of India's 'exceptionalism' may lead other countries that have the capability to 'go nuclear' such as Brazil, Taiwan, or South Korea, to reconsider their decision to renounce nuclear weapons. The US-India nuclear deal rewards proliferation and devalues nuclear abstinence. If India is allowed to have its radioactive cake and eat it too why couldn't Argentina, Brazil or Japan be allowed to do the same? Mohan (2008, 143) argues that the nuclear deal 'integrates India into the global [nuclear] order on terms favourable to New Delhi'. Yet rather than finding a modus vivendi with the United States and the global nuclear order, Indian behaviour and US acquiescence to its demands have significantly challenged that order, as shown by Indian Prime Minister Manmohan Singh's announcement in 2005 that by signing the agreement India had now joined a 'new nuclear order'. The impact of the US-India nuclear deal on the International Nuclear Order will be fully discussed in Chapter 6.

Conclusion: Rethinking US Non-proliferation Policy Toward South Asia

US non-proliferation policy toward South Asia after the May 1998 nuclear tests was doomed to failure because it started from the wrong premises. As the remaining superpower, the United States is in a unique position to enforce the norm against proliferation exercising *greater* influence over recalcitrant NPT holdouts (India, Pakistan, Israel) or 'rogue' NPT parties (Iran, Iraq, North Korea) provided it has the political will to do so. In October 1994 the United States pressed North Korea to sign the 'Agreed Framework' and commit itself to a workable timetable for nuclear roll back. The George W. Bush administration has also put pressure on North Korea to roll-back its nuclear weapons program. Why should India and Pakistan be treated differently? The US policy of double standards in non-proliferation damaged the NPT regime during the Cold War (Smith and Cobban 1989). Similar damage has been done by the Bush administration's distinction between good proliferators and bad proliferators. The United States should avoid the mistakes of the past when trying to move forward the—now stalled—global

29 See e.g., 'The US-India Nuclear Cooperation Deal: A Critical Assessment', Arms Control Association Press Briefing; Panelists: David Albright, Leonard Weiss, Daryl G. Kimball, 15 February 2006, http://www.armscontrol.org/events/20060215_India_Transcript.asp?print; Earl II et al. (2006); 'Experts Urge Senate to Fix Flaws in US-Indian Nuclear Proposal', Arms Control Association, E-mail update, 12 September 2006; Cirincione et al. (2006); Bengelsdorf et al. (2005); 'Congress and the US-Indian Nuclear Deal', Arms Control Association Press Briefing, 20 June 2006, http://www.armscontrol.org/events/20060620_India_Roundtable.asp?print; 'US-India Nuclear Deal Tears Hole in Nonproliferation Guidelines', *Disarmament Diplomacy*, No.82 (Spring 2006), http://www.acronym.org.uk/dd/ dd82india.htm.

nuclear disarmament agenda. The multilateralization of nuclear arms control can only be achieved if all the countries that remain outside the NPT regime are treated equally, without double standards. The purpose of non-proliferation is to prevent the emergence of new nuclear weapon states and to change the behaviour of recalcitrant states. Because the NPT is almost universal, the non-proliferation norm is still strong, despite the Indian and Pakistani tests. India's nuclear policy is the exception, not the rule.

After the Kargil war, US non-proliferation policy toward South Asia has been limited to managing Indo-Pakistani crises with nuclear overtones (see Chapter 4) and preventing India and Pakistan from carrying out further nuclear tests. The US government has not only abandoned the goal of rolling back both countries' nuclear weapons programs; it has also abandoned all efforts at progress on the four non-proliferation benchmarks that were the linchpin of US non-proliferation policy toward the region after the Indian and Pakistani nuclear tests of May 1998.

The United States has completely subordinated its non-proliferation objectives in South Asia to winning the 'war on terror' and 'containing' the rise of China. The latter informs the US-India nuclear deal, although, as Kolodziej (2008, 319) notes, this is an illusory goal, because:

> India prefers to accommodate China, a posture reciprocated by China, rather than join the United States in a lame alignment stretching from Japan through Indonesia to check China. India's long history with Western colonialism, its record of non-alignment during the cold war, and the fierce nationalism of its elites across the Indian political spectrum preclude any enduring and reliable membership as a subordinate power within an American-led coalition of the willing.

The United States has a tendency to subordinate its nuclear non-proliferation policy to other foreign policy goals, as shown by the double standard of its Middle East policy (ignoring Israel's possession of nuclear weapons while forcing the Arab states to remain non-nuclear) and the 'blind eye' policy toward Pakistan during the Reagan administration and after 11 September 2001, when Pakistan became an indispensable ally in the 'war on terror'. Perkovich (2008, 63) argues that it was almost impossible for the United States to prevent Pakistan from going nuclear: 'Nuclear weapons would be the ultimate equalizer, the denier of Indian superiority, the proof of Pakistani mettle and durability. As long as the Pakistani (largely Punjabi) obsession with India would remain, the determination to acquire an equalizer to its power would be unstoppable'. However, during the Cold War the United States could have prioritized non-proliferation instead of subordinating it to other foreign policy goals, such as expelling the Soviet Union from Afghanistan. After the Cold War, the Clinton administration made a genuine effort to place nuclear non-proliferation on top of the US foreign policy agenda, obtaining the indefinite extension of the Nuclear Non-Proliferation Treaty in 1995 and showing strong support for the Comprehensive Test Ban Treaty (CTBT), signed in 1996.

However, Clinton's visit to India in March 2000 reflected the tension between the strong commitment to non-proliferation of the first Clinton administration and the move in his second term to keep the US nuclear arsenal indefinitely, despite paying occasional lip service to full nuclear disarmament (Schell 2000, 34). This ambivalent attitude toward nuclear disarmament played a role in India's decision to go overtly nuclear by testing nuclear weapons in 1998 (see Talbott 2006, 84).

Could Pakistan have been dissuaded from testing nuclear weapons after the Indian nuclear tests of 11 and 13 May 1998? According to Perkovich (2008, 63), 'It is nearly impossible to conceive how the Pakistani obsession with equalizing India could have been temporized by the United States or anyone else, and how once India pursued nuclear weapons capability Pakistan could have been persuaded not to follow' . Yet the United States could have offered to station US troops along the Line of Control (LOC) between the Indian- and Pakistani-controlled parts of Kashmir (as requested by Pakistan, see Talbott 2006, 66) or it could have offered to mediate in the Kashmir dispute, as the Pakistanis had been requesting for years, or at least it could have adopted a more pro-active policy short of outright mediation, e.g., by bringing the matter to the UN Security Council or prioritizing the Kashmir issue in the US foreign policy agenda. Yet the US 'tilt' toward India that began during the Kargil crisis (see Chapter 4) prevented the United States from taking those steps. Clinton unequivocally announced his determination *not to mediate* in the Kashmir dispute in his televised address to the people of Pakistan on 25 March 2000, 'We cannot and will not mediate or resolve the dispute in Kashmir. Only you and India can do that through dialogue' (quoted in Wirsing 2003, 111). By supporting India in the Kashmir dispute, the Clinton administration began to de-hyphenate US policy toward India and Pakistan making it difficult to 'focus like a laser' on the Indian-Pakistani dispute as Clinton's envoy, Ambassador Strobe Talbott, had promised the Pakistanis in May 1998 (Talbott 2006, 66). The United States abandoned the traditional US position of considering Kashmir a disputed territory in the 'Washington Joint Statement' that ended the Kargil dispute, in which the US president said 'he would take a personal interest in encouraging an expeditious resumption and intensification' of Indian and Pakistani bilateral efforts to settle the Kashmir dispute, 'once the sanctity of the Line of Control has been fully restored' (see Wirsing 2003, 83). Wirsing (2003, 84–85) persuasively argues that in July 1999 the Clinton administration had actually mediated between the two countries to prevent the Kargil war from escalating to the nuclear level; which could have opened the door for a formal US mediation on the Kashmir dispute that is considered by Pakistan the 'core' issue in its conflict with India. Yet subsequent US policy closed that door because the 'tilt' toward India became a strategic alignment with India's position on Kashmir, especially after the beginning of the global 'war on terror' in September 2001. The 'tilt' toward India was already reflected in the use of the term 'sanctity' in the 'Washington Joint Statement' to

describe the Line of Control in Kashmir, that was not considered, until then, a permanent international border.[30]

The US 'tilt' toward India and the cooling of ties between the United States and Pakistan in 2008 make it more difficult for the United States to adopt and implement a comprehensive regional strategy toward the region, and is an important obstacle to bring nuclear non-proliferation back in as part of such a comprehensive strategy. As the United States strengthens its strategic partnership with India, Pakistan is enlarging its nuclear weapons arsenal and seeking a nuclear deal with China to counter the US-India nuclear deal.[31] The lack of even-handedness in US policy toward India and Pakistan after the 1999 Kargil crisis (when the United States supported the Indian position) has been the most serious shortcoming of US South Asia policy. However, even if the United States re-hyphenates its South Asia policy by adopting a balanced approach toward the South Asian rivals, it will not necessarily be able to influence the direction of India's and Pakistan's nuclear weapons programs. A negative consequence of the US-India nuclear deal is that the United States has lost leverage over India. The experience of negotiating the nuclear deal in 2005–2008 has taught the Indians that they can always obtain a better deal with the United States if they adopt a 'wait and see' negotiating strategy, without making any concessions to their American counterparts. As a result, it is not at all clear that the Obama administration will be able to tell the Indian government: 'You got the nuclear deal; it's time for you to sign the Comprehensive Test Ban Treaty (CTBT) and stop producing fissile material for nuclear weapons'. However, the Obama administration, with a Democratic majority in the US Senate, may be able to obtain the US Senate's ratification of the CTBT, which would place President Obama in a better position to demand the Indian government to join the CTBT and start serious negotiations to implement the Clinton administration's non-proliferation benchmarks. The United States should reassess its priorities in South Asia and put nuclear non-proliferation on top of its South Asia policy, going beyond the current emphasis on purely 'managing' nuclear proliferation in the subcontinent. US policy should move beyond reducing nuclear risks and diminishing incentives for India and Pakistan to test and deploy nuclear weapons. Unfortunately the de facto recognition of both countries as nuclear weapon states, the subordination of US non-proliferation policy toward Pakistan to the 'war on terror', and the 'tilt' toward India after the 1999 Kargil crisis have deprived the

30 In October 1993 Clinton's Assistant Secretary of State for South Asia Robin Lynn Raphel declared that 'We [the US government] view Kashmir as a disputed territory and that means that we do not recognize that Instrument of Accession as meaning that Kashmir is forever more an integral part of India' (Quoted in Wirsing 2003, 93). India's preferred solution to the Kashmir dispute is to convert the Line of Control (LOC) into the permanent international border between India and Pakistan.

31 I am indebted to Ambassador Strobe Talbott for bringing this point to my attention.

United States of the leverage it had immediately after the May 1998 Indian and Pakistani nuclear tests.

The South Asian rivals will not take steps to implement the Clinton administration's four non-proliferation benchmarks until there are open democratic debates on the nuclear issue in both countries and the nuclear disarmament movements achieve enough 'critical mass' to have an impact on actual policy (Vanaik 2005). The consensus among Indian elites on the desirability of keeping the bomb will only change on the face of strong domestic political opposition. Unfortunately, the absence of a US non-proliferation policy toward South Asia during the George W. Bush administration (2001–2009) and the lifting of all the economic sanctions imposed after the May 1998 nuclear tests have given a certain international legitimacy to the Indian and Pakistani nuclear arsenals, especially in the case of India after the approval of the US-India nuclear deal by the Nuclear Suppliers Group on 6 September 2008. However, the United States and the countries that benefit from the US-India nuclear deal (France, Russia) are not the same as the 'international community'. A number of non-nuclear weapon NPT parties (Austria, Ireland, New Zealand) strongly opposed the NSG waiver of the ban on nuclear trade with India in September 2008.

A dramatic change in US policy toward South Asia would generate greater international pressure to constrain the Indian and Pakistani nuclear weapons programs, creating the conditions for the formation of broad anti-nuclear coalitions in both countries, with enough power to compel their governments to abandon the madness of current pro-nuclear weapons policies. An open debate on the nuclear issue would strengthen the anti-nuclear movement in India, weakening the arguments of pro-bomb advocates in India and Pakistan, and forcing the Pakistani government to take seriously Pakistan's earlier proposals for regional denuclearization, such as a South Asia nuclear weapon-free zone or a mutual nuclear inspections regime with India.

The United States has the greatest power to constrain the development of the Indian and Pakistani nuclear arsenals. The Obama administration could renew US support for nuclear arms control and global nuclear disarmament (the 'zero' option as a desirable and achievable goal) along the lines proposed by Shultz et al. (2007, 2008) bringing nuclear disarmament back into the global agenda, and putting pressure on India and Pakistan to freeze their stockpiles of weapons-grade fissile materials bilaterally, or as part of a global Fissile Material Cut-off Treaty (FMCT). The United States can still bring nuclear non-proliferation back in to South Asia, reviving the Clinton administration's non-proliferation benchmarks in order to achieve a strong nuclear arms control regime as a first step toward the denuclearization of the subcontinent. Whether India and Pakistan like it or not, the nuclearization of South Asia has internationalized their bilateral disputes, including Kashmir that will remain a nuclear flashpoint for the foreseeable future. The nuclear predicament is a global issue and the use of nuclear weapons in a future Indo-Pakistani war would be a tragedy not only for India and Pakistan, but for the whole international community. It is time for India to abide by its long-

standing commitment to global nuclear disarmament and take the first steps to denuclearize South Asia. The United States should take advantage of its strategic partnership with India to convince the Indian political elite that denuclearization is the only rational solution to the South Asian nuclear predicament. The United States has so far been able to successfully manage the post-nuclear tests Indo-Pakistani crises, but it cannot do so indefinitely. The failure to intervene in time in the next crisis would have unforeseeable consequences for South Asia and the rest of the world.

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Chapter 6
Conclusion: South Asian Security and the Post-9/11 International Nuclear Order: Can the Genie be Put Back into the Bottle?[1]

Introduction

Indo-Pakistani relations are at a crossroads. Whether the two South Asian rivals can overcome sixty years of permanent conflict—'hot' wars in 1947–1948, 1965, 1971, and 1999, interspersed with periods of 'cold' wars and constant distrust of each other's intentions—will depend not only on the political will of their ruling and strategic elites to do so but also on a variety of domestic and international structural factors, including the impact of the September 11 terrorist attacks against the United States on their bilateral relationship. The decision of the Musharraf regime in Pakistan to support the US-led 'war on terror' in the aftermath of 9/11, and the US-India rapprochement in the 2000s, epitomized by the US-India nuclear deal of 2005–2008 have made both South Asian rivals de facto allies of the United States. Yet both countries' strategic ties with the United States have not led to a normalization of Indo-Pakistani relations; on the contrary, the war on terrorism has arguably produced a 'collateral damage' in their relationship. As we have seen in Chapter 4, as the Kashmir dispute remains unsolved, India and Pakistan are condemned to suffer recurrent bilateral crises that resemble the Cuban missile crisis and create the danger of a catastrophic nuclear exchange in the subcontinent.

Proliferation optimists claim that the very existence of the Indian and Pakistani nuclear arsenals guarantees deterrence stability in South Asia. However, because of the 'war on terrorism', Pakistan has lost Afghanistan as a strategic asset to carry out a 'defense in depth' in case of war with India. By shrinking Pakistan's strategic borders, the 'war on terrorism' makes Pakistan more dependent on the threat of use of nuclear weapons for its survival (a situation similar, though not identical, to Israel's strategic predicament). Moreover, the erosion of the nuclear taboo during

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1 Portions of this chapter are drawn from Mario E. Carranza, 'At the Crossroads: US Non-proliferation Policy toward South Asia after the Indian and Pakistani Tests', *Contemporary Security Policy*, Vol. 23, No. 1 (April 2002), pp. 93–128, and from Mario E. Carranza, 'Can the NPT Survive? The Theory and Practice of US Nuclear Non-proliferation Policy after September 11', *Contemporary Security Policy*, Vol. 27, No. 3 (December 2006), pp. 489–525. Reproduced with permission of Taylor & Francis, http://www.informaworld.com.

the Kargil war and the 2001–2002 border confrontation increases the danger of nuclear use in future Indo-Pakistani military conflicts.

The lesson of the four Indo-Pakistani crises with nuclear overtones (see Chari et al. 2007) is that the potential stability benefits of the nuclearization of South Asia are not worth the residual risk of nuclear war that has increased with the adoption of the 'Cold Start' doctrine by the Indian army. As Kapur (2008, 90) notes, 'Indian doctrinal changes increase the likelihood that Indo-Pakistani crises will escalate rapidly, both within the conventional sphere and from the conventional to the nuclear level'; even if the political leadership in both countries has 'learnt' from past crises to tread carefully before triggering a bilateral confrontation that may inadvertently lead them to the edge of the nuclear precipice. On the other hand, the fact that the United States always appears to be ready to defuse Indo-Pakistani crises may lead the South Asian rivals to start a crisis knowing that they can always count with American help. Yet as Raghavan (2001, 96) notes, 'In a limited war, both India and Pakistan would have difficulty establishing the saliencies that control escalation', and once the fighting begins US diplomacy may not be able to prevent a limited conventional conflict from escalating to a nuclear exchange, even if it only involves the use of tactical nuclear weapons. During the Kargil war, US President Clinton was able to convince Pakistani Prime Minister Sharif of the gravity of the situation before the outbreak of hostilities, when the Central Intelligence Agency had credible information about the imminent deployment of nuclear-armed missiles on the Pakistani side of the border. In a future crisis, the US president may not be even able to talk to the Pakistani Prime Minister, e.g., if there is a 'nuclear coup d'etat' and/or if the Pakistani military (who has always been in control of the Pakistani nuclear arsenal) disobeys the civilian leadership at the height of a crisis. This is not a far-fetched scenario, considering that Pakistan may be on the verge of becoming a 'failed state' (see e.g., Benjamin 2008).

The purpose of this chapter is to explore the prospects for the emergence of a strong nuclear arms control and disarmament regime in South Asia, as part of a broader effort to move forward the currently stalled global nuclear arms control and disarmament negotiations. The chapter revisits the question of the interaction between the International Nuclear Order (henceforth INO) and Indo-Pakistani nuclear relations in light of the discussion in previous chapters of the four Indo-Pakistani nuclear crises and the 'American factor' as an obstacle—rather than a facilitator—in helping the South Asian rivals to join the post-Cold War/post-9/11 international nuclear order. Section 1 examines the debate on the INO between William Walker and his critics, and alternative proposals to integrate the 3 NPT holdouts to the INO. Section 2 discusses three contending approaches to the future role of nuclear weapons in international politics. Section 3 examines the crisis of the NPT-centered INO and three alternative scenarios. Section 4 considers whether India and Pakistan are more secure after the May 1998 nuclear tests. The next two sections analyze the prospects for nuclear arms control and disarmament in South Asia after the post-tests nuclear crises. The concluding section considers alternative scenarios of Indo-Pakistani nuclear relations and the future International Nuclear

Order and the prospects for a new US policy toward South Asia during the Obama administration.

The Debate on the International Nuclear Order: Walker vs. his Critics

William Walker's article, 'Nuclear Enlightenment and Counter-enlightenment' (see Walker 2007a), has sparked a scholarly debate on the crisis of the NPT-centered international nuclear order (INO). This debate is relevant to the question of whether—and to what extent—can India and Pakistan be integrated into the INO without destroying the nuclear non-proliferation regime and its linchpin, the NPT. At the heart of this debate are the question of whether the nuclear order that prevailed before the George W. Bush administration can be resurrected (see Roberts 2007) and the related issue of alternative scenarios for nuclear arms control and disarmament, globally, and in South Asia.

The Bush administration's Nuclear Posture Review (NPR), announced in December 2001, called for 'greater flexibility' in nuclear forces and planning in order to maintain a 'credible deterrent' against new adversaries. Moreover, the NPR re-legitimized nuclear weapons as weapons of war as official US nuclear doctrine (see Drell 2006).[2] Whether the US nuclear posture will significantly change during the Obama administration is an open question, but the skepticism of Walker's critics about the prospects for reviving the NPT-centered international nuclear order is misplaced, because Obama has said that 'as president [he] will set a new direction in nuclear weapons policy and show the world that America believes in its existing commitment under the Nuclear Nonproliferation Treaty to work to ultimately eliminate all nuclear weapons'. Obama has also said that 'as long as states retain nuclear weapons, the United States will maintain a nuclear deterrent that is strong, safe, secure, and reliable' (Arms Control Association 2008, 1). Even if there is not much progress toward the negotiation of a treaty abolishing nuclear weapons during the Obama administration, Obama's strong commitment to 'secure the ratification of the Comprehensive Test Ban Treaty (CTBT) from the US Senate at the earliest practical date' and 'then launch a diplomatic effort to bring on board other states whose ratifications are required for the treaty to enter into force' [including India and Pakistan] shows that the progressive marginalization of nuclear weapons from international politics is a possible scenario. As Walker (2007b, 754) notes, 'the 2010 NPT Review Conference [provides] an obvious occasion on which to recommit states to the [Non-Proliferation] Treaty and associated norms, rules, and instruments'. The US-India nuclear deal and the Nuclear Suppliers Group (NSG) waiver allowing member states to export nuclear technology to India—despite its active nuclear weapons program and its refusal to join the NPT as a non-nuclear weapon state—have clearly undermined the NPT

2 See 'Nuclear Posture Review Leaks: Outlines Targets, Contingencies', *Arms Control Today* 32: 3 (April 2002), 20.

regime. However, US leadership and a recommitment by the NPT parties to the 'Thirteen Steps' to move forward on the nuclear disarmament agenda could force India and Pakistan to join the CTBT. In this scenario, the damage to the NPT-centered INO would at least be limited as India becomes truly a 'unique' exception to commonly agreed rules on export controls for sensitive nuclear technology.

The debate between Walker and his critics is related to a parallel debate that has been sparked by Shultz et al. (2007, 2008) on whether article VI of the Non-Proliferation Treaty (NPT) is an integral part of the NPT bargain (see Ford 2007; Graham 2008). The 184 non-nuclear weapon states parties to the NPT have agreed to forgo acquiring the most destructive weapons of self-defence in exchange for the right to the 'fullest possible exchange' of nuclear technology for peaceful uses (article IV) and a commitment by the five treaty-recognized nuclear weapon states (NWS) to end the nuclear arms race and achieve nuclear disarmament. Several of Walker's critics argue that article VI was not an integral part of the NPT bargain. For example, Ruhle argues that at the time of the NPT's signing (1968) the nuclear weapon states' nuclear disarmament obligation under article VI 'seemed of little significance. The treaty was widely understood as a freeze on the number of existing NWS, not as a means of disarming them. To put it bluntly, the treaty was supposed to perpetuate nuclear inequality indefinitely (or at least until 1995) and article VI was a way of making this fact a little easier to bear' (Ruhle 2007, 514). Other scholars, such as Graham (2008) claim that article VI *is* an essential part of the NPT grand bargain. As Graham (2008, 9) puts it, 'The NPT is not a gift from the treaty's 182 non-nuclear weapon states to the five nuclear weapon states; it is a political and strategic bargain'. According to Walker, Article VI is what makes the NPT part of an enlightenment project, whose ultimate goal is the abolition of nuclear weapons: '[The NPT] offered the possibility of greater mastery of the political sphere and of reining in forces which, if states were left to their brutish ways, could result in a lethal nuclear anarchy'(Walker 2007a, 437).

As Scoblic (2008) notes, 'The complete denuclearization of the United States and its foes has long been a taboo subject within the foreign policy establishment'. In January 2007 George P. Shultz, Henry Kissinger, William J. Perry, and Sam Nunn published an article in the *Wall Street Journal* calling for a world free of nuclear weapons (Shultz et al. 2007). Since then, nuclear disarmament is no longer a taboo subject. The debate sparked by Shultz et al. is important, not only because they have been increasingly challenged by other members of the Washington DC strategic elite (arguing that global nuclear disarmament is not feasible and could even be counterproductive, see e.g., Brown 2007–2008; Sugden 2008) but also because it has important policy implications. The fate of the NPT may well depend on whether those who argue that article VI is an integral part of the NPT win this debate. Rhianna Tyson, Rebecca Johnson, and other nuclear disarmament advocates have shown that the key to prevent the NPT from becoming irrelevant is to reconnect nuclear non-proliferation with nuclear disarmament:

> Disarmament will remain unattainable in the absence of multilaterally-based, effective, and verifiable non-proliferation measures. Likewise, without verifiable, irreversible disarmament, the NPT is doomed to failure (Tyson 2004, 62).

India was arguably part of the nuclear enlightenment project during the Nehruvian era (1947–1964); India would have probably signed the NPT in 1968 had it included a time frame for the complete nuclear disarmament of the five 'nuclear-haves'. However, India became part of the counter-enlightenment reaction when it decided to join forces with the Bush administration to create a new international nuclear order (INO) that would subordinate the goal of universal nuclear disarmament to other foreign policy goals, such as winning the 'war on terror', and the war on 'bad proliferators', such as Pakistan. During the Rajiv Gandhi and Narasimha Rao administrations there was a tension between the enlightenment and counter-enlightenment projects; both prime ministers still paid lip service to the goal of universal, non-discriminatory nuclear disarmament within a time frame, but in 1990 a secret Indian nuclear arsenal—authorized by Rajiv Gandhi—came into existence. In authorizing the nuclear tests of May 1998, the BJP regime tipped the balance in favor of the counter-enlightenment project. Later on, Prime Minister Vajpayee's BJP administration would positively respond to the Bush administration's overtures and sign the 'Next Steps in Strategic Partnership' (NSSP) agreement with the United States in January 2004. In the Spring of 2004 Nehru's Congress Party returned to power, but nothing in the public statements of the Manmohan Singh government seems to indicate that the Congress Party is willing to return to the Nehruvian tradition for which the enlightenment project's vision of a nuclear weapons free world was worth pursuing; even if the Manmohan Singh government continues paying lip service to the goal of global nuclear disarmament.

In his critique of the 'disarmament myth', Ruhle accuses Walker of putting 'the responsibility for the NPT crisis squarely on the NWS, as it makes their disarmament a precondition for progress. Yet how much nuclear disarmament would have to occur before the critics are satisfied and doubts about the NWS' "good faith" removed? If the true goal of "enlightenment" is nuclear abolition, there will be no intermediate point at which the pressure on the NWS to go further would cease' (Ruhle 2007, 515).

Before the May 1998 nuclear tests, the lack of progress toward global nuclear disarmament, and the indefinite legitimization of 'nuclear apartheid' (the distinction between 'nuclear haves' and 'nuclear have nots') with the indefinite extension of the NPT in 1995 were the main reasons India had decided not to join the NPT, while keeping the nuclear weapon option open. As Frey (2006, 169) notes, 'Until the late 1980s, India's policy on the nuclear issue was defined by two taboos: first, India would not build nuclear weapons; second, India would not accede to a non-proliferation regime without clear disarmament provisions for the nuclear weapons states'.

Yet the May 1998 nuclear tests and the nuclear deal with the United States in 2005–2008 marked the death knell of Nehru's vision of India's moral exceptionalism. Before the nuclear tests, Indian security analysts and the strategic elite called for global nuclear disarmament knowing that the nuclear weapon states would not oblige; yet by not overtly going nuclear they still had some moral authority vis-à-vis the 183 countries that had given up nuclear weapons by joining the NPT. In the late 1980s and early 1990s security analysts such as K. Subrahmanyam would still present India 'as the world's nuclear Robin Hood, fighting for the right of the deprived "have-nots" against the discriminatory regime of the few "haves"' (Frey 2006, 172). Yet 'by 2000 a consensus had emerged to drop India's long-held rejection of the international nuclear non-proliferation regime and engage in some form of negotiation on India's possible adherence to it' (Frey 2006, 189). India stopped complaining about the discriminatory nature of the international nuclear order embodied in the NPT as soon as it was admitted to the nuclear club in 2005–2008 through the US-India nuclear deal, legitimized by the Nuclear Suppliers Group's (NSG) waiver of the strict export controls established in the wake of the first Indian nuclear test in 1974. Those export controls were for 30 years an important element of the non-proliferation regime's 'nuclear enlightenment' project and have now been undermined by India's admission to the nuclear club. For many years, India argued that the nuclear weapon states (NWS) had no moral authority to lecture it on the need to give up the nuclear weapon option and join the NPT as a non-nuclear weapon state; but India no longer uses that language in its nuclear diplomacy; although, as Frey (2006, 188) notes, India itself is now practicing 'nuclear apartheid', by denying others—including Pakistan—the right to join the nuclear club.

Walker's critics are very skeptical about the possibility of reviving the NPT-centered International Nuclear Order (INO). In his rejoinder, Walker argues that the INO might be heading, 'after the decline that followed its early post-Cold War consolidation, towards renewed consolidation', among other reasons because 'there has developed a strong common interest among states in preventing terrorist groups, insurgents or their criminal suppliers from gaining access to nuclear materials and technologies'; and because:

> the behavior of China and India could turn out to be more constructive than destructive of nuclear order: China is committed to strategic caution by its pre-eminent interest in economic stability and in avoiding Japan's nuclearization; and India may (only may) become a constructive force if a mutually satisfying *rapprochement* with the United States and with the non-proliferation regime can be negotiated (Walker 2007b, 755).

Assuming that India has already achieved a mutually satisfying rapprochement with the United States after the successful completion of the nuclear deal in October 2008, it will be much more difficult (if not impossible) to gain acceptance of India as a member of the nuclear club by the whole of the international community. The

NPT-centered International Nuclear Order (INO) is not 'owned' by the United States, France, Germany, Russia, or Australia—all countries that will benefit from the NSG waiver that now allows nuclear trade with India. The NPT-centered INO belongs to the whole international community. How can India achieve a 'mutually satisfying rapprochement' with the international community and the 184 countries that have formally renounced nuclear weapons and joined the NPT? The NSG waiver is not the same as a rapprochement. India is still outside the NPT regime and the NPT is still the 'only game in town' to prevent the spread of nuclear weapons. Only by taking significant steps toward nuclear disarmament, such as signing the Comprehensive Test Ban Treaty (CTBT), could India meaningfully become a 'constructive force of nuclear order', even if that order is redefined to meet new challenges, such as the danger of nuclear terrorism. Roberts (2007, 529) is skeptical about Walker's claim that the moment may be auspicious to 'resurrect the nuclear order that prevailed before Bush'. Yet President Obama has expressed a keen interest in strengthening the NPT-centered INO (see Arms Control Association 2008).

An important limitation of the debate between Walker and his critics is that it ended up narrowly focusing on whether the crisis of the INO must be blamed on the George W. Bush administration, without addressing the broader issue of the nature of the nuclear order that will emerge in the twenty-first century. Ruhle (2007, 515) argues that 'no country can seriously claim to conduct a foreign and security policy that is entirely free of contradictions, least of all a country [like the United States] that carries most of the burden of maintaining international order'. Yet the Obama administration will have to resolve the contradiction between claiming that the United States must keep its nuclear arsenal for deterrence purposes 'as long as other states retain nuclear weapons' and its support for the distant goal of a nuclear weapons free world.

On the other hand, Yost (2007, 430) argues that 'Walker exaggerates the ability of the United States to influence the policies of other countries. The limits of American power help to explain why the challenges at hand—both analytical and practical—are much more daunting than [Walker's] article suggests'. One of the problems is that—as indicated in Chapter 5—the US-India nuclear deal has emboldened India to demand more and more concessions from the United States. In the process, the United States has lost leverage over India, even on issues such as the Comprehensive Test Ban Treaty; despite earlier Indian commitments after the 1998 nuclear tests to have a domestic political debate on the issue in order to bring the treaty into force (see Talbott 2006).

Schulte (2007, 504) agrees with Yost in that 'even a hyperpower such as the United States is subject to real limits on its leverage, especially with major countries'. Yet a different US policy toward India (see Chapter 5) could have forced the South Asian rivals to roll back their still incipient nuclear weapons programs after the 1998 nuclear tests. Post-tests sanctions against the two countries were not sustained long enough to become effective. The United States is not the only country responsible for the crisis of the international nuclear order, but the

lack of US leadership during the George W. Bush administration (see Cirincione 2000) has aggravated the crisis. India has learned that it can always obtain more concessions from a complacent US government; although the whole international community—not just the United States—must be blamed for failing to enforce Security Council Resolution 1172 of 6 June 1998, which called for India and Pakistan 'immediately to stop their nuclear weapon development programs and to join the NPT as non-nuclear weapon states'.

Despite the fiasco at the 2005 NPT Review Conference, the international norm against nuclear proliferation is arguably still strong, and the overwhelming majority of the 184 non-nuclear weapon states party to the treaty comply with their commitment not to 'go nuclear', and are still committed to achieving global security without nuclear weapons. However, three key states, India, Pakistan, and Israel, remain outside the treaty while one NPT party (Iran) and a former NPT party (North Korea) are apparently pursuing a nuclear weapons program. Moreover, during the George W. Bush administration (2001–2009) the United States pursued a foreign policy agenda that significantly undermined nuclear arms control. For example, the United States refused a Russian demand to promote the CTBT at the 2005 NPT Review conference. These developments eroded the norm against proliferation embodied in the NPT and its role as a confidence-building measure.

Integrating the Three NPT Holdouts to the International Nuclear Order

The emerging conventional wisdom among US scholars is that persuading India, Pakistan, and Israel to join the NPT as non-nuclear-weapon states while rolling back their nuclear weapon programs is a futile endeavor. Instead, they propose to press these states to commit themselves 'politically' to non-proliferation obligations similar to those of the five recognized NWS (see e.g., Cohen and Graham Jr. 2004, 4). The October 2008 nuclear deal between the United States and India goes in that direction. Similarly, Talbott (2006, 233) has proposed 'a "5+2" arrangement, whereby India and Pakistan would earn a degree of leniency in exchange for their yielding to international arms control measures and nonproliferation safeguards. They would be treated as NPT outliers rather than outlaws'.

These proposals are misguided, for three reasons. First, as Talbott (2006, 233) admits, 'trying to get India to accept the 5 + 2 deal may be Mission Impossible. If the experience of 1998–2000 is any guide, India will resist any bargain that does not give it exactly the same standing as the NPT nuclear weapons states'. India earned much more leniency from the United States with the US-India nuclear deal of 2005–2008, managing to obtain almost the same standing as the NPT nuclear weapons states while excluding Pakistan from such privileged status. Why would they accept a 5 + 2 deal when they got a much better deal with the United States and the Nuclear Suppliers Group? Second, the fact that non-nuclear weapon states such as Argentina and Brazil are silent about the US-India nuclear deal does not mean that they approve a nuclear accord that rewards proliferation and devalues nuclear abstinence. New Agenda Coalition (NAC) countries such as Brazil have

consistently rejected attempts to recognize India, Pakistan, and Israel as *de facto* or *de jure* nuclear weapon states (NWS). Third, recognizing these three states as NWS without reviving global fissile material cutoff negotiations and engaging them in those negotiations increases the danger of nuclear terrorism, a very serious problem in the case of Pakistan.

Other non-proliferation experts have recommended the *de facto* admission of the three NPT holdouts to the nuclear club if they accept the same non-proliferation obligations of the NWS. In exchange, they would receive nuclear assistance to make their nuclear arsenals 'safe', but would not gain access to sensitive nuclear technologies in exchange for their 'good behavior' (see Perkovich et al. 2005). Although this policy recommendation would not condone the US-India nuclear deal, it would still reward these three countries by implicitly recognizing their nuclear weapon status, even though the overwhelming majority of non-nuclear-weapon NPT parties have 'made clear that these countries [India, Pakistan, and Israel] should not receive new nuclear weapon state status or any special status whatsoever'.[3] This view is critically important to prevent the NPT from becoming irrelevant and was conveyed to the three NPT holdouts in the 2000 NPT Review Conference Final Document. Legitimizing the three NPT holdouts as nuclear-weapon states in return for their fulfilling the obligations that apply to the declared NWS under the NPT would mark a tipping point in the process (that unfortunately has already begun) of decoupling nuclear disarmament from nuclear nonproliferation; making it much more difficult to make the declared NWS accountable for their article VI obligations under the NPT and indefinitely postponing serious negotiations to achieve global nuclear disarmament.

The Future Role of Nuclear Weapons: Contending Approaches

The May 1998 Indian and Pakistani nuclear tests and other non-proliferation setbacks, such as the collapse of the UN inspection efforts in Iraq, in the late 1990s, the slow implementation of START II, the US Senate's rejection of the CTBT in October 1999, and the US plans to deploy a national missile defence, have opened up a major debate on the future role of nuclear weapons in world politics. There are three schools of thought:

1. the 'traditionalist'/proliferation optimist school argues that nuclear weapons will continue playing a role in international relations and that nuclear deterrence will keep the peace;

3 See Japan's second PrepCom working paper, quoted in Applegarth and Tyson (2005, 39).

2. the 'abolitionist'/proliferation pessimist school argues that it is feasible and desirable to eliminate nuclear weapons to avoid a nuclear catastrophe; and
3. the 'marginalist' school argues that nuclear weapons will be progressively removed from centre stage 'to everyone's advantage, even if they [cannot] be eliminated in the near-term' (Walker 2000, 703; see also Baylis and O'Neill 2000, 1–3 and 210).

In the first half of the 1990s several non-proliferation victories (the renunciation of nuclear weapons by several 'problem countries', the indefinite extension of the NPT in 1995 and the signing of the CTBT in 1996) led some analysts to believe that non-proliferation was unstoppable and that nuclear weapons would soon be marginalized from international politics, paving the way for a world of 'virtual nuclear arsenals' and the formal abolition of nuclear weapons by a universal treaty with a strong verification system (Graham 1991; Mazarr 1997; Schell 1984). In the United States, several proposals were made to move toward Jonathan Schell's 'weaponless deterrence,' including proposals to remove nuclear weapons from delivery vehicles and place them in 'strategic escrow' while START I, START II, and possibly a global ban on ballistic missiles was implemented (Frye 1996).

Yet the above-mentioned setbacks and the Bush II administration's decision to go ahead with National Missile Defence (NMD) have given new life to the 'traditionalist' school which argues that nuclear weapons have utility in international politics. For the traditionalists, since nuclear weapons cannot be disinvented, in the nuclear age there is no alternative to nuclear deterrence (see e.g., Carnesale et al. 1983) and those who are in favour of nuclear disarmament are naive or utopian. The traditionalist revival and a certain return of nuclear weapons to centre stage were facilitated by the Clinton administration's decision to indefinitely postpone negotiations for a START III Treaty with Russia (despite the Russian offer to move below the limit of 2,500 warheads originally established for those negotiations) and by a rediscovery by non-proliferation scholars of Bernard Brodie's work and the virtues of deterrence (Paul, Harknett and Wirtz 1998). Traditionalists argue that nuclear weapons are needed to deter the 'new threats' represented by nuclear, chemical, and biological weapons programs in 'rogue' states such as Iran and North Korea. Some scholars even argue that the United States should use nuclear weapon threats to deter biological and chemical weapons attacks (Betts 1998, 31; Haass 1996; Joseph 1997; for a rebuttal, see Sagan 2000).

On the other hand, the abolitionist approach is no longer a marginal school of thought, even if there is still a long way to go before the rhetoric surrounding the 'logic of zero' (Daalder and Lodal 2008) is turned into concrete policies, but as Rebecca Johnson (2008, 17) notes, 'the changes in focus and argument indicate a qualitative breakthrough'. Mainstream academic think tanks, such as the Rand Corporation, have considered the possibility of the virtual abolition of nuclear weapons (see e.g., Molander and Wilson 1994, 35). A number of former senior US military and defence officials (such as Gen. Lee Butler, former commander-in-chief of the US Strategic Air Command, and Robert McNamara, former Secretary

of Defence) and governments allied with the United States, such as Australia, New Zealand, and Mexico, have openly advocated the abolition of nuclear weapons (see McNamara 2000; Cerniero 1996). Moreover, traditionalists lightly dismiss the notorious achievements of the 1990s: the implementation of START I ahead of schedule, the signing of the CTBT in 1996 by 155 countries, including the five nuclear weapon states, and the emergence of new players in the non-proliferation game, such as South Africa (the first state in the world to abolish a nuclear arsenal) the Group of 10, the New Agenda Coalition (NAC), and several non-governmental organizations (NGOs),[4] creating enhanced pressures on the nuclear weapon states to make progress toward nuclear disarmament. The South Asian nuclear explosions of 1998 were arguably an exception to a general trend to marginalize the role of nuclear weapons in international politics, even though they were presented by some scholars as confirming the worst fears of the 'traditionalist' school and the need to rely on nuclear deterrence to protect US national security and enhance global security (see e.g., Wirtz 1998). The Bush administration's plans to retain a nuclear force indefinitely and the renouncement of the 'Thirteen Practical Steps' toward nuclear disarmament (adopted at the 2000 NPT Review Conference) undermined the US commitment to the norm of non-proliferation. The centrality assigned to nuclear weapons in the Bush administration's Nuclear Posture Review announced in December 2001 re-legitimized the bomb as a weapon of war as official US nuclear doctrine and made the South Asian nuclear tests less of an exception, even though the majority of the international community, represented by the non-nuclear weapon states party to the NPT is still in favor of leaving the nuclear age behind. However, if the Obama administration takes significant steps to implement the Shultz et al. (2007, 2008) vision of a world without nuclear weapons, the 2010 NPT Review Conference could be a success and the abolitionist school could gain the upper hand in the debate on the future role of nuclear weapons.

There are formidable obstacles to implement the vision of a world without nuclear weapons (see Perkovich and Acton 2008) but a paradigm shift is underway. The first major obstacle is nuclearism: the 'cult of the bomb' that is still deeply influential among the strategic elites of the nine nuclear weapon states. The second obstacle is 'the bomb in the mind':

> More than any physical arsenal, it is this mental construct, inscribed forever in the human species' common heritage of thought, that has for more than sixty years defeated every attempt to deliver the world from the danger of atomic annihilation (Schell 2007, 26).

4 On 25 July 1999, the Tokyo Forum for Nuclear Non-Proliferation and Disarmament released its report, *Facing Nuclear Dangers: An Action Plan for the 21st Century*. The Canberra Commission on the Elimination of Nuclear Weapons produced its report in 1996. Several other NGOs, such as the World Court Project (which includes several prominent American lawyers) and in India, the Coalition for Nuclear Disarmament and Peace (CNDP) have called for the elimination of nuclear weapons.

The third major obstacle to make progress toward the abolition of nuclear weapons is the 'nuclear renaissance', the increasing interest in 'peaceful' nuclear energy programs demonstrated by a number of states—including several countries in the Middle East—that could turn into a proliferation nightmare. There is no clear-cut distinction between 'good atoms' and 'bad atoms' and the same stages in the nuclear fuel cycle that allow a country to produce nuclear fuel for peaceful energy programs—such as uranium enrichment—can be taken advantage of to pursue a nuclear weapons program. Despite these obstacles, the growing movement for negotiations on nuclear abolition helps to reconnect nuclear non-proliferation with nuclear disarmament, forcing the five nuclear weapon states (the 'big five') under the NPT to recommit themselves to the disarmament roadmap sketched by the 2000 NPT Review Conference plan of action. A reaffirmation by the 'big five' at the 2010 NPT Review Conference of their 'unequivocal commitment' to eliminate nuclear arsenals—adopted in 2000—would challenge the claim made by Walker's critics (and the Bush administration's representative at the 2005 NPT Review Conference) that the NPT is a 'purely' non-proliferation treaty aimed only at 'bad proliferators', thus contributing to the revival and reinforcement of the NPT.

The Crisis of the NPT-Centered International Nuclear Order: Alternative Scenarios

In a sense, the international nuclear order has always been in crisis, but it has managed to survive as the 'only game in town'. As Potter and Mukhatzhanova (2008, 156) note, 'Questions about the NPT's survivability were raised as early as in the 1970s, both before and after the first NPT Review Conference'. Yet the current crisis of the INO is qualitatively different from past crises. As Roberts (2007, 525) notes, 'There is no sense (shared notion) of what the system of deterrence can or should encompass in the next nuclear order or how it might best be managed'. Moreover, even among those who agree that the goal of a world without nuclear weapons is essential there is no agreement on what is the best strategy to achieve that goal. As Rebecca Johnson notes:

> Though more countries have begun to speak about the need for a nuclear weapon convention, the Non-Aligned Movement (NAM) countries are still more inclined to reiterate their long-held rhetoric about a time-bound framework for nuclear disarmament (Johnson 2007, 1).

Would India support a Nuclear Weapons Convention (NWC) or would it only support an incrementalist, step-by-step approach to global nuclear disarmament (see e.g., Simpson 1995)? If so, what steps would India suggest and be ready to implement?

As Walker (2000, 723) notes:

> The only nuclear order that we have (it has no *reliable* substitute) is unambiguously dedicated, for practical as well as moral reasons, to the elimination of nuclear weapons. This nuclear order's survival now relies upon contraction: it cannot tolerate another prolonged period of expansion in or refinement of nuclear arsenals, let alone the acquisition of nuclear weapons by nation-states acting in violation of international law.

From this perspective, the May 1998 Indian and Pakistani nuclear tests and the Bush administration's policy of keeping an arsenal of thousands of nuclear weapons indefinitely, while planning the production of 'bunker-buster' nuclear weapons, have been major blows to the NPT-centered INO. After the failure of the May 2005 NPT Review Conference to produce a final document with concrete steps for stopping the spread or eliminating nuclear weapons, the formal NPT regime became increasingly less influential. Can the NPT-centered INO survive in the post-9/11 international security environment?

There are three possible scenarios for the International Nuclear Order (INO) in the twenty first century:

1. A More Discriminatory New International Nuclear Order

According to Talbott (2006, 233), 'The Indians will, under any imaginable government, continue to press for removal of the last, detested, though now mostly symbolic, vestiges of what they see as a discriminatory, US-conceived, and US-enforced nuclear order'. Ironically, despite India's strategic elite's rejection of the NPT-centered INO, by carrying out the May 1998 nuclear tests, India opted for becoming part of the existing INO, rather than changing it (Sen 2001, 133). Yet after being admitted to the nuclear club in 2005–2008, India stopped complaining about 'nuclear apartheid' and the discriminatory nature of the NPT, while the Bush administration's international security policies were laying the ground for the emergence of an even more discriminatory INO, based on the distinction between 'good proliferators' and 'bad proliferators'. As Potter (2005, 343) puts it, '[the Bush administration] regard[ed] nuclear proliferation to be both inevitable and not necessarily a bad thing'. The qualified optimism of Bush's non-proliferation strategy (see Carranza 2006, 499) was reflected in the US-India nuclear deal of 2005–2008, which constitutes a major challenge to the NPT-centered INO; opening up the possibility of a *new* INO, without formally amending the NPT or the NSG's legal structure. The Nuclear Suppliers Group's historical decision, in September 2008, to lift the 30-year old embargo on nuclear trade with India is technically a waiver, but it sets a bad precedent that may be followed by other cracks in the regime's framework.

The contours of an emerging new INO began to appear with the shift from non proliferation to counterproliferation during the first term of the George W. Bush administration (2001–2004) As Johnson notes, the Bush administration:

> appear[ed] to have been successful in carrying most if not all its fellow nuclear weapons possessors into a narrow interpretation of non-proliferation as a policing operation rather than a regime-building process because it feeds directly into their own desires to retain and, in some cases, develop their nuclear arsenals. Even New Delhi, erstwhile champion of non-aligned pressure for nuclear disarmament, will happily go along with narrow non-proliferation provided that India is accepted as a member of the nuclear club, as is increasingly the case (Johnson 2006b, 75–76).

On the other hand, the Iranian and North Korean hard cases of nuclear proliferation led the Bush administration to challenge the core NPT bargain. The treaty allows countries that forswear nuclear weapons to possess uranium enrichment and plutonium reprocessing facilities as long as they declare these plants to the International Atomic Energy Agency (IAEA) and permit the agency to inspect them. The problem is that uranium enrichment and plutonium reprocessing cannot only be used to fuel nuclear reactors for energy production, but to produce fissile material necessary to make nuclear bombs. Thus a state with nuclear weapon ambitions can legally seek control over the nuclear fuel cycle and then invoke article X of the NPT to withdraw from the treaty on a three-month notice and proceed to build a nuclear arsenal. North Korea's withdrawal from the NPT and Iran's nuclear weapon ambitions illustrate this problem. It is not clear whether the Bush administration will succeed in closing this loophole (see Sanger 2005). For many NNWS, many of them developing countries, the option to pursue nuclear energy is considered vital to the achievement of energy independence and economic subsistence.

The vision of a 'new nuclear world order' that began to take shape during the George W. Bush administration completely ignored the existence of nuclear weapon-free zones in most of the Southern Hemisphere and was based on the optimistic assumption that since nuclear deterrence keeps the peace, the 'benefits' of the bomb must be extended worldwide. Thus Jaswant Singh, Indian Prime Minister Vajpayee's minister for external affairs, 'pointed out that "large parts of the world today, enjoy the benefit of the extended deterrence of nuclear weapons power"' (quoted in Schell 2007, 78). From this perspective, nuclear weapons were laying the foundation of a 'new security paradigm' for the twenty-first century. By going nuclear, India was joining a global security system that gave the world full nuclear 'coverage'. This vision ignored the progress toward non-proliferation and disarmament achieved in the twenty-first century (India and Pakistan are the exception, not the rule; the overwhelming majority of states has given up the bomb) and tacitly accepted the Bush administration's distinction between 'good proliferators' and 'bad proliferators'.

An important component of the emerging INO is UN Security Council Resolution 1540 of April 2004 that enables the Security Council to take Chapter VII measures against a proliferator, even if that state is not a signatory of the NPT. The second important component of the emerging INO is the Proliferation Security

Initiative (PSI) that 'exemplifies the shift from non-proliferation approaches based on the multilateral NPT regime to counter-proliferation as a policing operation' (Johnson 2006b, 67). UN Security Council Resolution 1540 was originally conceived by the United States and the United Kingdom as a way of legitimizing and contextualizing PSI-type operations. The PSI seeks to block illicit transport of Weapons of Mass Destruction (WMD) materials by sea, land, or air. It authorizes several specific actions, including 'boarding and searching proliferation-suspected flagged ships, whether in internal or international waters; permitting another PSI member to board and search flagged vessels and seize any proliferation-related cargoes, …grounding and searching proliferation-suspected aircraft or denying them air space; and carrying out inspections at ports, airports, and other shipping facilities, with seizure of any proliferation-relevant cargoes' (Johnson 2006b, 67–68). According to Ruhle, (2007, 521) 'the growing number of participating countries demonstrates that the logic of interdiction is increasingly accepted as a necessary and legitimate supplement of a broader non-proliferation policy—all the more so because the interdiction of a shipment of centrifuges headed for Libya may have contributed to Qadhafi's decision to forgo a nuclear option'. However, many countries are concerned that rather than supplementing the NPT-centered INO, the PSI enables a cartel of states to act outside the institutions established by the NPT and related WMD regimes, 'operating coercively to suit the interests of the powerful and impede legitimate trading or technology transfers among developing states' (Johnson 2006b, 69). Countries such as China and Russia are concerned that actions under the PSI could go beyond the PSI stated goals, violating international law, hampering international commerce and allowing greater powers to the US military.

Since the NPT is very difficult to amend, in the absence of US leadership to make progress toward global nuclear disarmament, the shift from non-proliferation to counter-proliferation may slowly but surely condemn the NPT to irrelevance, as the dominant non-proliferation discourse focuses predominantly on the need to prevent illicit nuclear transfers from rogue states such as North Korea or Iran to terrorist organizations. In this scenario, a number of non-nuclear weapon NPT parties may consider the possibility of developing a nuclear weapon option to counter potential US coercion. These states would not withdraw from the NPT. Instead, they would take advantage of the treaty's loopholes to develop an independent nuclear weapon option. Even if the NPT does not formally collapse, a silent crowd armed with nuclear weapon capabilities could come into existence if countries such as Argentina, Brazil, Japan, or Taiwan decide to reconsider their decision to give up nuclear weapons and secretly pursue a nuclear weapon option while remaining NPT parties.

2. A More Equitable International Nuclear Order, based on NPT Revival and Reinforcement

The NPT is still strongly supported by the majority of the international community and it would not be in the best interest of the United States to let the NPT collapse. A reinforced and more equitable NPT would involve a combination of effective collective enforcement against non-compliers such as Iran and North Korea and a renewed commitment on the part of the nuclear weapon states to implement their article VI obligation to dismantle their nuclear arsenals. It would require an about-face in current US non-proliferation diplomacy, repairing the damage to the non-proliferation regime caused by the US-India nuclear deal and moving decisively in three fronts:

1. Obtaining US Senate ratification of the Comprehensive Test Ban Treaty (CTBT) at an early date;
2. Reviving global talks to achieve a verifiable Fissile Materials Cutoff Treaty (FMCT) at the United Nations Conference on Disarmament in Geneva, and
3. A binding commitment on the part of the nuclear weapon states (NWS) not to use or threaten to use nuclear weapons against the non-nuclear weapon states (NNWS).

The chances for revival of the NPT at the 2010 Review Conference depend on a renewed commitment to the treaty on the part of member states, especially the United States and the other four declared NWS. In this scenario, the Obama administration would abandon the Bush administration's policies and recommit the United States to the total elimination of nuclear weapons and a multilateral approach to nuclear non-proliferation. However, renewed US leadership is a necessary, but not sufficient condition to save the NPT. The other half of a new 'grand bargain' at the 2010 Review Conference is to find ways to address the post-9/11 security concerns of the nuclear-haves, especially the United States. The 188 NPT parties and the four NPT holdouts (India, Pakistan, Israel, and North Korea) could sign a Protocol to the NPT committing themselves to the physical protection of nuclear materials and facilities to prevent their theft by terrorist organizations.[5] On the other hand, after the diplomatic showdown between the United States and Iran over the latter's uranium enrichment program it has become critically important to prevent abuses of article IV for the purposes of developing nuclear weapons options or programs. To deal with this problem, IAEA Director General El Baradei has proposed:

5 On the requirements for designing and installing effective Fissile Material Protection, Control, and Accounting (MPC&A) Systems see Busch (2004, 19–24).

> that we revisit the availability and adequacy of controls provided over sensitive portions of the nuclear fuel cycle under the current non-proliferation regime. We should consider limitations on the production of new nuclear material through reprocessing and enrichment, possibly by agreeing to restrict these operations to being exclusively under multinational controls (El Baradei 2004, 6).[6]

He has also proposed 'multinational approaches to the management and disposal of spent nuclear fuel'. While these proposals deserve serious consideration, in the absence of a concrete road map for verifiable, irreversible nuclear disarmament (the other side of the NPT's 'grand bargain') the non-nuclear-weapon states are unlikely to accept the Baradei proposal or related plans. The success or failure of such plans is also contingent on economic considerations.

The challenge for the preparatory committees for the 2010 NPT Review Conference is to devise mechanisms for increased transparency to make sure that the NNWS do not have hidden nuclear weapons programs. This would require a strengthening of IAEA safeguards, going beyond the expanded inspection rights and tools of the Additional Protocol, and providing the NPT with enough institutional powers to take responsibility for overseeing compliance and enforcement (see Johnson 2006c).

3. A New NPT as the Linchpin of a Disarmament Oriented International Nuclear Order

Could movement toward the reduction and elimination of nuclear arms regain momentum in the post-Bush era? In this scenario, a completely new Non-Proliferation Treaty is negotiated, with a concrete time frame for achieving a global nuclear disarmament agreement.[7] IAEA safeguards are further strengthened, paving the way for a Nuclear Weapons Convention, an abolitionist accord comparable to the Biological and Toxin Weapons Convention (BWC), entered into force in 1975, and the Chemical Weapons Convention (CWC), entered into force in 1997. Despite its discriminatory nature, the NPT was conceived as a first step toward more far-reaching disarmament measures. In this sense, the NPT implicitly questioned the soundness and acceptability of basing international peace and security on perpetual nuclear deterrence. As Scheinman (1990, 61) notes, 'If the NPT denies the legitimacy of new nations acquiring nuclear weapons, then measures to delegitimize them more generally become relevant'. Unless the United States

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6 One related possibility that is receiving international attention is the Global Nuclear Energy Partnership, (www.gnep.energy.gov) which would provide nuclear fuel to states with nuclear power, provided they do not enrich on their own. See also 'Reactor Dreams: The Global Nuclear Energy Partnership', *The Economist*, 25 February 2006, 38–39.

7 Only the United Kingdom has given a hint that it takes its disarmament commitments seriously by studying the verification problems involved in implementing a nuclear weapons convention. See United Kingdom (2003).

fundamentally changes its international security and non-proliferation policies, a Nuclear Weapons Convention is unlikely in the near future, due to the severe blows suffered by the NPT regime during the George W. Bush administration (2001–2009) that have destroyed the radical nuclear disarmament agenda potentially brought within reach by the NPT/CTBT breakthroughs of the mid-1990s.

Yet as Walker (2000, 724) notes, if nuclear anarchy is to be averted, 'another much weightier project needs to gain ascendancy in Washington, in the national as well as the international interest: the restoration of international confidence in the nuclear order's health and vitality'. The United States, Russia, China, the United Kingdom, and France, are primarily responsible for genuinely embracing the project of nuclear disarmament. Without progress in real nuclear disarmament negotiations between the United States and Russia (going beyond the 2002 Moscow Treaty) it will be impossible to implement article VI of the NPT. However, progress toward global nuclear disarmament is also very difficult without Indian and Pakistani cooperation. The Fissile Material Cutoff Treaty (FMCT) and the CTBT will not work without a commitment by the South Asian rivals to forgo nuclear testing while freezing their stockpiles of weapon-grade fissile material. As Shultz et al. (2007, 2008) show, nuclear disarmament and 'unproliferation' (see Perkovich 1999) are inextricably linked. The official and academic discourses in India and the United States in the 2000s have de-linked them; the challenge is how to reconnect current global efforts to move forward with the global nuclear disarmament agenda (that was stalled in the Bush II years) with the Indian Nehruvian tradition of strong support for those efforts (summarized in the 13 steps agreed upon at the 2000 NPT Review Conference) while changing the terms of the domestic policy debate in India away from the 'learning to live with the bomb' discourse toward practical steps to reduce the nuclear danger in South Asia in synch with global nuclear disarmament efforts.

As Drell and Goodby (2008, 23) note, 'With the possible exception of a brief period shortly following World War II after the Acheson-Lilienthal Report was adopted by the Truman administration, the goal of a nuclear weapons-free world has not provided a compass for policy, nor has it had any real operational impact on US government policies'. It is no wonder that most US policy experts on South Asia and South Asian scholars do not seriously consider South Asia's denuclearization. Why worry about it if the much-demanded (by India and others) time frame for global nuclear disarmament will never happen? As Perkovich and Acton (2008, 29) note, 'The United States is the primary link' between 'regional dynamics, the wider global order and prospects for advancing towards nuclear abolition'. In that sense, the United States is both the problem and the potential solution to the problem. Similarly, Indian and Pakistani cooperation are essential to move forward toward nuclear abolition. For Indian Prime Minister Nehru (1947–1964) the possession or use of nuclear weapons or the threat to use them was 'repugnant' and 'a crime against humanity'. Her daughter, Prime Minister Indira Gandhi, said that nuclear weapons 'only bring danger where there was none before'. Yet as Schell (2007, 51) notes, the Nehruvian critique of 'nuclear apartheid' 'left the door

open to nuclear realism, for it implied a belief that countries were unwise to do without nuclear weapons in a world in which others had them—the central tenet of deterrence'.

Like the United States, India is both the problem and the potential solution to the problem. India still formally advocates nuclear abolition, and it has always been in favor of a nuclear regime based on the equal rights of all countries. Yet with the passing of time, 'the call for total nuclear disarmament largely degenerated into an empty phrase that was only applied as a strategy to legitimize India's quest for the bomb' (Frey 2006, 203).

After India's admission to the nuclear club in 2005–2008 the international nuclear order has arguably become even more discriminatory than in 1970, when the NPT entered into force. However, more and more members of the Indian strategic elite are now in favor of keeping the door of the nuclear club closed, and—as we have seen—after the approval of the US-India nuclear deal by the US Congress, India is now part of an emerging INO that is more discriminatory than the old NPT-centered INO. However, prominent members of the Indian strategic elite, such as K. Subrahmanyam are still forcefully arguing in favor of a nuclear regime based on the equal rights of all countries and aimed at the abolition of nuclear weapons:

> The basic premise of the Nuclear Nonproliferation Treaty (NPT) was enshrined in Article VI of the treaty, which stated that the possession of nuclear weapons should only be temporary and that the international goal ultimately was to eliminate them…. The dilemma facing the world today is whether it should aim at preserving the present non-proliferation status-quo and strengthening it or aim at the final elimination of nuclear weapons as the international community did with its efforts to ban chemical weapons (Subrahmanyam 2008, 9).

If the Indian strategic elite is serious about this, there is some hope that India could change course and move from scenario 1 (that preserves an unequal INO with eight—instead of five—'nuclear-haves') to scenario 3, or even to scenario 2, after joining the Comprehensive Test Ban Treaty and signing a Fissile Material Cutoff Treaty (FMCT). Either way, the denuclearization of South Asia would be back in the international and regional nuclear arms control agenda.

What is the More Likely Scenario?

The energy crisis has sparked a renewed interest in nuclear power as an alternative energy source. More than 40 countries are considering starting nuclear power programs. This nuclear renaissance includes a number of non-aligned states and several countries in a conflict—prone region—the Middle East. These countries are now prioritizing article IV of the NPT (that recognizes the right of non-nuclear weapon states to the 'fullest possible exchange' of nuclear technology for peaceful purposes) above article VI that commits NPT parties to nuclear disarmament. As

Johnson (2008, 16) notes, 'The US-India nuclear deal is part of this prioritizing of nuclear power', and has the potential of profoundly undermining the NPT regime. If Israel and Pakistan receive the same kind of privileges as India from the Nuclear Suppliers Group (NSG) (despite the fact that they never joined the NPT) scenario 1 above is more likely to consolidate itself as the new International Nuclear Order. Whether scenario 1 comes into existence will also depend on whether a significant number of countries decide to export sensitive nuclear materials to India.[8] The real explanation of the NSG waiver that made the US-India nuclear deal possible is that a number of countries with heavy nuclear industries want to take advantage of the growing emphasis being put by a number of NNWS on the NPT's article IV in order 'to launch a nuclear renaissance and make big profits out of constructing new nuclear power plants and selling nuclear technologies all over the world' (Johnson 2008, 18).

On the other hand, if the movement in favor of nuclear abolition gains strength and the Obama administration exercises leadership in the three fronts mentioned in scenario 2 (CTBT, FMCT, and negative security assurances) the negative impact of the US-India nuclear deal and the impending nuclear renaissance could be contained; and it would be possible to revive and strengthen the NPT as a way station toward a nuclear weapons free world (scenario 3).

Indo-Pakistani Relations in the Twenty-First Century: Security with Nuclear Weapons?

Are India and Pakistan more secure after declaring nuclear weapons status with the May 1998 nuclear tests? As we have seen in Chapter 4, the peace process—known as the 'composite dialogue'—that began after the resolution of the 2001–2002 border military standoff is very fragile and only a few Nuclear Risk Reduction Measures (NRRMs)—such as the hotline between the two foreign secretaries—have been adopted. Moreover, in the wake of the terrorist attack on Mumbai on 26–29 November 2008, the 'composite dialogue' was suspended by India. The lack of progress toward the resolution of the Kashmir dispute—the key bone of contention between the two countries—shows the need for active international mediation to achieve a final settlement of the India-Pakistan conflict.

The uselessness of nuclear weapons to fight a war was recognized by the United States and the Soviet Union at the Reagan-Gorbachev summit in Geneva in 1985, when they made their famous joint statement: 'A nuclear war cannot be won and should never be fought'. Yet India and Pakistan still believe that nuclear weapons are a source of military advantage and repeatedly threatened to use them in combat during the two post-tests crises. After Pakistan went overtly nuclear on 28 May 1998, India lost its conventional military superiority in most limited war

8 The new Rudd government in Australia has declared that it will not sell uranium to India so long as it remained a non-NPT party. See Clarke (2008, 327–28).

scenarios; Pakistan was now able to threaten the use of nuclear weapons if India crossed the Line of Control in Kashmir to carry out 'hot pursuit' operations against Kashmiri insurgents. In the same way as 30,000 nuclear weapons proved useless to prevent the Soviet collapse, Pakistani nuclear weapons would be useless to prevent the collapse of the Pakistani state. On the other hand, the Indian nuclear arsenal is useless to prevent or fight against terrorist attacks such the Mumbai attacks of 26–29 November 2008. It is difficult to see how nuclear weapons have increased Indian or Pakistani national security. As Amartya Sen (2001, 124) puts it, after the May 1998 nuclear tests, 'Bangladesh is now probably the safest country in the subcontinent to live in'. The nuclearization of South Asia has produced a great deal of national insecurity; it has even threatened an economic crisis, as in India during the long drawn-out military standoff of 2002 when the US State Department's travel advisory scared Western companies with investments in the partly 'globalized' Indian economy.

Proliferation optimists argue that nuclear deterrence will keep the peace in South Asia. Yet as we have seen in Chapters 2 and 4, stable nuclear deterrence is very difficult to achieve; it is at most—as Ashley Tellis puts it—'ugly' nuclear deterrence. The Kargil war—less than a year after the 1998 nuclear tests—was the first Indo-Pakistani armed conflict in almost 30 years, challenging the idea that 'existential deterrence' dissuades nuclear weapon states from fighting conventional wars. As Amartya Sen (2001, 128) notes, 'the nuclearization of the subcontinental confrontations need not reduce the risk of war (either in theory or in practice), and it escalates the penalty of war in a dramatic way'. Arguably, Argentina, Brazil, and South Africa are safer without the bomb than India and Pakistan with the bomb.

If India's decision to test nuclear weapons in May 1998 was a strategic misstep, how does one explain it? According to Frey (2006, 23), 'In contrast to India's perception of its regional security environment, its main motive in challenging the global nuclear order had less to do with its perception of this order as a source of insecurity than as a source of injustice and subjugation'. As we have seen in Chapter 3, the search for international status/prestige is the main reason India decided to 'go nuclear', knowing that it would allow Pakistan to level the playing field against India's superior conventional military capability. By going nuclear India would redress the injustice of being discriminated by the Western neocolonialist powers. In the words of Indian Defense Minister George Fernandez, 'Why should the five nations that have nuclear weapons tell us how to behave and what weapons we should have?'. Yet by getting the bomb India has lost the moral authority to condemn others. After the IAEA Board of Governors agreed to treat India like one of the five defined nuclear weapon states in the NPT, allowing it to develop nuclear weapons outside of IAEA safeguards, India stopped complaining about the unfairness of the international nuclear order now that it had been admitted to the nuclear club.

Frey's quantitative analysis of 705 editorial and opinion articles on the nuclear issue selected from five of India's major national newspapers during the crucial period from 1986 to 2005 shows that India's political and strategic elites were

delusional in their assessment of the nuclear dangers involved in the nuclear crises with Pakistan to the point that they even belittled Pakistan's nuclear capability at a time in which their troubled neighbor had enough nuclear weapons to destroy Indian cities. As Frey (2006, 82) notes, the Indian strategic elite was more interested in vindicating India's nuclear policy 'rather than impartially assessing the effects of nuclear weaponization in the bilateral relationship. By calling Pakistan's deterrence posture a "nuclear bluff" Prime Minister Vajpayee suggests that nuclear weapons are of little relevance in the bilateral relationship'. The reason for this delusional attitude is what Jonathan Schell (2007) calls the 'bomb in the mind'; the same reason the United States did not officially recognize the nuclear danger until the Reagan –Gorbachev summit in Geneva in 1985.

Looking Ahead: Nuclear Arms Control and Disarmament in South Asia after the Post-tests Nuclear Crises

After the May 1998 nuclear tests, there was no real progress toward bilateral or regional nuclear arms control in South Asia. Indian and Pakistani nuclear diplomacy mirrored the practices of the superpowers during the Cold War, when arms control was largely a fig leaf for, at best, maintaining the nuclear status quo. In theory, the nuclear tests should have facilitated nuclear arms control; now that nuclear weapons were out in the open it should have been easier to control them, given the political will to do so. Subrahmanyam (1994, 195) argued that overt minimum nuclear deterrence between India and Pakistan would have the advantage of stabilizing Indo-Pakistani nuclear relations, especially if both sides adopted a no-first use strategy, and started arms restraint measures. However, the adoption of overt minimum nuclear deterrence postures in the wake of the May 1998 nuclear tests was not followed by nuclear arms restraint. On the contrary, India and Pakistan embarked on a full-fledged missile race,[9] and a slower race to produce weapons grade fissile material.[10] Technical and

9 India has been testing two nuclear capable ballistic missiles, the Prithvi short-range missile (150–250 km) and the Agni medium-range missile (1,500–2,500 km) for several years. In February 2001 Indian Defense Minister George Fernandes said the two-stage Agni 2 (2,500 km) was 'ready for induction into the defense arsenal'. Pakistan has about 30 nuclear-capable M-11 missiles (300-km range) supplied by China and the Hatf-1 (80-km) and Hatf-2 (280-km) short range missiles. In July 1997 it tested the Hatf-3 (600-km) and on 6 April 1998 it tested the Ghauri missile (1,500-km) that could reach deeply into Indian territory and may have triggered the Indian nuclear tests of 11 and 13 May 1998. See Biringer (2001, 60–64); Srivastava (2000) and Sheppard (2002). During the May–June 2002 crisis Pakistan tested three nuclear capable ballistic missiles.

10 Military expenditure data indicate an impending Indo-Pakistani conventional and nuclear arms race: 'An American defense journal predicted that India would be spending a whopping $95 billion on military equipment and weapons over the next 15 years. Out of this, $30 billion will go to the air force, $25 billion to the army and $20 billion to the navy. Another $20 billion will be spent on acquiring nuclear weapons, delivery systems,

financial problems have slowed down the Indo-Pakistani nuclear arms race, but as Perkovich (2002, 57) notes, 'even crawlers can cover enough ground to get into danger fairly quickly'.

The Indo-Pakistani nuclear and missile race is partly explained by the failure of US non-proliferation policy toward South Asia and the subordination of that policy to other US foreign policy goals, such as the war on international terrorism (see Chapter 5). Moreover, after 'India's Draft Nuclear Doctrine', prepared by a Government appointed advisory board, was released in August 1999, it became clear that the Indian government was embarked on a nuclear arms build-up, and that Pakistan would follow suit.

Before the May 1998 nuclear tests, there was still hope of achieving a robust and comprehensive nuclear arms control regime in South Asia. In June 1997, Indian Prime Minister I.K. Gujral and Pakistani Prime Minister Nawaz Sharif agreed on an eight-point agenda for talks on a broad range of issues, from the Kashmir dispute and how to reduce the risk of nuclear conflict to economic and commercial cooperation. After the May 1998 nuclear tests, Prime Ministers A. B. Vajpayee and Nawaz Sharif agreed to follow through with the 1997 agenda for talks in September 1998; their foreign secretaries met the next month to discuss formally 'peace, security, and confidence building measures (CBMs)'.

The Indian proposals included:

- A No-First-Use Pact;
- Advanced notification of ballistic missile flight-tests;
- To extend the prohibition of attack against each other's nuclear installations to include a promise not to target population and economic centers with nuclear weapons;
- Verify and exchange seismic data;
- Cooperate in multilateral forums toward complete nuclear disarmament,
- Improve CBMs that have been agreed to but not satisfactorily implemented;
- Enhance the Agreement on Advance Notice on Military Exercises, and the Agreement on Prevention of Air Space Violations (Gagné 2001, 49).

Pakistan presented the following proposals:

- A 'no-war' pact and a commitment to abide by the non-use of force and the peaceful settlement of disputes;

R&D and nuclear command and control structures' (Nadkarni 2001). For Pakistan, the May 1998 nuclear tests started an arms race that has been difficult to sustain, given its meager economic resources. Pakistan's defense budget has shot up from Rs 131.3 billion in 1997–1998 to Rs 152.7 billion in 1999–2000 to plateau at Rs 131.6 billion in 2001–2002 (Mustafa 2002). It is estimated that India 'currently has a stockpile of approximately 50–60 assembled nuclear warheads' (Natural Resources Defense Council 2007, 74). 'According to current estimates, Pakistan has approximately 60 nuclear warheads' (Kerr 2008, 10).

- Implement CBMs, such as upgrading existing 'hot lines'; and
- Implement a 'strategic restraint regime' with India, including 'the prevention of a nuclear and ballistic missile race, risk reduction mechanisms, the avoidance of nuclear conflict, a formalized moratorium on nuclear testing', and 'a mutual and balanced reduction of forces and armament' (Gagné 2001, 50).

The Indian proposal for a No-First Use Pact was a non-starter, because due to its conventional military inferiority Pakistan is extremely reluctant to sign such an agreement. The proposal to cooperate in multilateral forums toward complete nuclear disarmament could help to build trust between the two countries, but it was almost cost-free, considering the stalling of arms control negotiations at the CD in Geneva.

Neither of the October 1998 proposals was implemented. To a certain extent, the South Asian rivals continued playing the Cold War game of making 'friendly' overtures that look good to the international community and to domestic constituencies, knowing that the other side would not accept them. For example, a 'no-war' pact is unacceptable to India as long as Pakistan continues challenging the *status quo* in Kashmir by supporting the Muslim insurgency.

There was some hope that India and Pakistan would learn to 'live with the bomb' after a historic weekend bus trip to Pakistan by Indian Prime Minister Atal B. Vajpayee in February 1999. Prime Minister Vajpayee asked the Pakistanis to 'put aside the bitterness of the past and let us together make a new beginning'. His 'bus diplomacy' seemed to show the light at the end of the tunnel, although there remained stiff domestic opposition in both countries to a comprehensive settlement of Indo-Pakistani disputes, especially the critical Kashmir conflict.

The Lahore Declaration, signed by both Prime Ministers on 21 February 1999, singled out the conflict over Kashmir as the main obstacle to peace, while reaffirming the 1972 Simla agreement, which committed both countries to settle all their disputes bilaterally and without resorting to the use of force. The document was important because it undermined the taboo that the Kashmir dispute was unsolvable. The two sides made two big concessions. India agreed to put the Kashmir issue on the negotiating table; while Pakistan agreed to de-link the discussion of the nuclear issue from the vexed Kashmir dispute.

The Lahore Declaration (made by the Prime Ministers) and the Memorandum of Understanding (MoU) signed by the Foreign Secretaries, were important steps to build mutual trust between the two countries. The Declaration included a joint commitment to a moratorium on testing nuclear weapons. The two countries promised a series of high-level bilateral meetings and to adopt several confidence and security building measures (including prior notification of ballistic missile tests) designed to reduce the risk of accidental or unauthorized use of nuclear weapons. Moreover, they agreed to exchange information on their nuclear doctrines and security concepts. The MoU called for each nation to work on measures to improve control over its nuclear weapons, and recommended reviews of existing

CBMs and emergency communications arrangements 'with a view to upgrading and improving these links'.

Unfortunately, the two countries failed to agree on the technical details required to implement any of the measures listed in the MoU. Despite the 'Spirit of Lahore' India and Pakistan continued their nuclear and missile race, including flight-testing of improved versions of their Ghauri (Pakistan) and Agni (India) intermediate-range ballistic missiles. Moreover, they failed to reach an agreement not to assemble or deploy nuclear weapons in ballistic missiles or other delivery systems, or an agreement to refrain from further nuclear tests.

The Kargil war (May–July 1999) buried the 'Spirit of Lahore' and the hopes for rapid progress toward a nuclear settlement (see Chapter 4). Pakistan must be blamed for shattering with its military adventure in Kargil the progress toward mutual reconciliation achieved at Lahore. After the Kargil war, India refused to sit down with Pakistan at the negotiating table, accusing its neighbor of supporting cross-border terrorism in the disputed territory of Kashmir. Bilateral negotiations were interrupted for more than two years, until May 2001, when India's Prime Minister Vajpayee decided to end its six-month unilateral cease-fire against the Muslim militants fighting Indian rule in Kashmir, while inviting General Musharraf, Pakistan's military ruler, for talks in the Indian city of Agra, that took place on 16–17 July 2001.

The Agra summit failed to make any substantive progress on the Kashmir dispute, or on reducing the risks of a nuclear exchange. The inability of President Musharraf and Prime Minister Vajpayee to agree on the text of a joint statement after three days of negotiations showed that it is extraordinarily difficult for India and Pakistan to communicate with each other. The Agra fiasco confirmed the need for third party mediation to jump-start a meaningful dialogue on nuclear dangers in the subcontinent.

After the Agra summit, the challenge for the South Asian rivals was to find a compromise formula to take account of both the 'centrality' of the Kashmir question (required by Pakistan) and the 'cross-border terrorism issue' demanded by India. Both parties promised to keep their lines of communication open; and on 27 July 2001 Musharraf formally invited Vajpayee to visit Pakistan. Both leaders were expected to meet during the UN General Assembly in New York in September 2001, but the meeting never took place, because of the 11 September terrorist attacks in New York and Washington.

Nuclear Arms Control in South Asia after the September 11 Terrorist Attacks

The terrorist attacks against the United States and the following US-led war on terrorism and against the Taliban regime in Afghanistan significantly affected Indo-Pakistani strategic interactions and the prospects for reviving a meaningful Indo-Pakistani dialogue on the nuclear issue.

Pakistan's decision to abandon support for the Taliban regime in Afghanistan while siding with the United States in the war on terrorism dramatically changed the strategic landscape in Southwest Asia and South Asia. The defeat of the Taliban resulted in the installation of a pro-Indian government in Kabul, although Pakistan was rewarded by the United States for sharing intelligence and allowing US forces to use military bases in Pakistan with the lifting of most US military sanctions and *all* US economic sanctions since 1990, when Washington imposed sanctions on Pakistan for its development of nuclear weapons. Before the post-September 11 war on terrorism, Pakistan was in danger of becoming an international pariah. General Musharraf seized the opportunity to mend fences with its erstwhile (often unreliable) ally, the United States, although at the cost of generating domestic opposition to his pro-US policy from Islamic fundamentalist groups, while losing Afghanistan as a strategic buffer in a future military confrontation with India.

After 11 September 2001, the Bush administration subordinated nuclear non-proliferation to the war on terrorism. After the Agra fiasco, US Secretary of State Colin Powell had offered to lend US help 'to the improvement of relations between Pakistan and India and the difficult outstanding issues, whether it is Kashmir or nuclear issues' (Rajghatta 2001). Any prospects of implementing this offer were delayed by a terrorist attack on the Indian Parliament on 13 December 2001 which led to the dangerous Indo-Pakistani military standoff and the May–June 2002 nuclear crisis, forcing US diplomacy to last-ditch efforts to avert a military confrontation between India and Pakistan. The war in Afghanistan and the military alliance with Pakistan—which was named a 'non-NATO major ally' in May 2004—established a more balanced US approach to the South Asian rivals, although the US-India alliance has become consolidated with the US-India nuclear deal of 2008, while US-Pakistan relations have deteriorated as General Musharraf and his successor, Ali Zardari, have been unable to abide by their commitment to end Pakistani military support to the Kashmiri Muslim insurgents accused of terrorism by India.

The new regional military-strategic situation created in South Asia by the September 11 terrorist attacks has increased nuclear dangers in South Asia in at least two ways. First, it has created the danger of unauthorized use (or threat of use) of Pakistani nuclear weapons by disaffected Islamic fundamentalist military officers.[11] Second, as we have seen in Chapter 4, the terrorist attacks against the

11 'Some of the [US] government's most experienced South Asia experts have doubts about Musharraf's ability to maintain control over the military and its nuclear arsenal in the event of a coup; there are also fears that a dissident group of fundamentalist officers might try to seize a warhead. The Army and the influential Inter-Services Intelligence, or I.S.I., have long-standing religious and personal ties to many of the leaders of the Taliban, dating back to Afghanistan's war against the Soviet Union in the 1980s, when Pakistan was the main conduit for American support' (Hersh 2001, 48). Top level military and civilian personnel dealing with nuclear weapons (including scientists) 'are controlled by their organizations and not psychologically screened. In this sense there is no such a thing in

Indian Parliament buildings in Srinigar, Kashmir (1 October 2001) and New Delhi (13 December 2001) created enormous political pressure on the Indian government for 'surgical' military strikes on training camps operated by the accused militant groups inside Pakistan-controlled Kashmir. Such a move could have provoked a Pakistani 'limited' conventional response against Indian-controlled Kashmir, touching off a broader conventional Indo-Pakistani war that could have escalated to the nuclear level. Even an escalating low-level conventional clash could inadvertently lead to a nuclear exchange. For example, terrorist attacks in Islamabad or New Delhi, killing prominent Pakistani or Indian officials could lead to gross operational miscalculations in the middle of uncontrollable popular outrage. Since both sides would probably enhance nuclear readiness (as they reportedly did in May–June 2002) an accidental detonation of a Pakistani nuclear weapon could be mistakenly interpreted by Pakistan as part of an Indian first strike, or the converse in the event of a nuclear weapons accident on Indian territory (Dunn 2002, 28).

As Nayak (2002, 1) notes, 'Senior [Bush administration] officials understandably hoped [in the fall of 2001] that the war on terrorism would provide a new opportunity to draw in both India and Pakistan, to strengthen US ties to each, and to nudge them to resolve their differences'. Unfortunately, such optimistic scenario has not come into existence. Truly, 'the United States probably has not had such robust relations with [India and Pakistan] simultaneously since the 1950s' (Fair 2004, 106). Yet US relations with Pakistan are rapidly deteriorating and as long as the 'war on terror' continues Pakistan will have an ambivalent policy toward the 'Pakistani Taliban', and the terrorism problem in the tribal areas bordering Afghanistan, unable (or unwilling) to confront Pashtun tribal leaders influenced by (or allied with) the Taliban. Moreover, the terrorist threat of Islamist radicalism threatens to destabilize the Pakistani state, opening up the possibility of state failure in Pakistan. Part of the problem is that as Stephen P. Cohen notes, 'The Pakistan Army can't govern Pakistan. We know that time and again, it's tried, it cannot govern it, but it won't let anybody else govern either'.[12] India is less likely to accept binding non-proliferation commitments, such as joining the CTBT, if Pakistan becomes a failed state. Moreover, as we have seen in Chapter 5, the US policy of 'de-hyphenating' US relations with India from US relations with Pakistan has not contributed to the normalization of Indo-Pakistani relations that remain fragile and crisis-prone. As Fair (2004, 105) notes, 'the issue of Kashmir is and will likely remain the 'hyphen' in US relations with India and Pakistan.

Overall, the 'war on terror' has had a negative impact on Indo-Pakistani relations and has delayed the establishment of a robust nuclear arms control

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Pakistan as an American PRP (Personal Reliability Program' (Italian Report 2002, 5). Two Pakistani nuclear scientists have been arrested for alleged cooperation with the Taliban. See also Albright (2002).

12 Stephen P. Cohen's speech during the round table, 'Mumbai Terrorist Attacks: A Challenge for India and the World', The Brookings Institution, Washington, DC, 3 December 2008, p. 24.

regime in South Asia. The Obama administration intends to turn around the war in Afghanistan and to reduce the Islamist radical threat in Pakistan by pushing for a reconciliation between India and Pakistan that would allow Pakistan to concentrate its military efforts on the tribal areas bordering Afghanistan that are threatened by radical Islamist groups. Yet a final settlement of the Indo-Pakistani conflict is very difficult—if not impossible—without a final settlement of the Kashmir dispute; which seems unlikely in the absence of international mediation, adamantly opposed by India.

As Raghavan (2004, 148) notes, the US military presence nearer to India after the September 11 terrorist attacks 'gave India an unexpected opportunity in its own war against terrorism'. After 9/11, India described Pakistan as a country that sponsored both the Taliban and Kashmiri 'terrorists', thus oversimplifying and reducing the extremely complex Kashmir issue (see Wirsing 2003) to a question of 'cross-border terrorism', blaming Pakistan for violating the 'sanctity' of the Line of Control in Kashmir as if it were a legitimate border under international law.[13] India's depiction of Kashmir as a terrorism problem did not help to improve India-Pakistan relations, because it did not address the root causes of the Kashmiri insurgency. On the other hand, as Pakistan became increasingly vulnerable to terrorist attacks—such as repeated attempts to assassinate General Musharraf—there was 'a new understanding of the need to stabilize Indo-Pakistani relations' (Raghavan 2004, 154).

Unfortunately, India's 'limited war' military doctrine—also known as 'Cold Start'—announced after the 2002 military standoff with Pakistan, makes bilateral relations more unstable, increasing the possibility that future bilateral crises will escalate to the nuclear level. On the other hand, as India modernizes its conventional forces and acquires and enhances its intelligence, surveillance, and reconnaissance (ISR) capabilities, it may be tempted to carry out pre-emptive strikes against the Pakistani nuclear arsenal. As Lavoy (2007, 17) notes, 'Pakistani defense planners have long been concerned about the survivability of their nuclear weapons production facilities and weapons arsenal.' The increasing gap between the Indian and Pakistani conventional military capabilities may force Pakistan to rely more on its nuclear arsenal for deterrence purposes. This is an obstacle to achieve a robust nuclear arms control regime between India and Pakistan. Even if the Obama administration exercises leadership to move forward in scenario 2 above (a more equitable INO) and even if India cooperates—nuclear disarmament has been a long cherished Indian goal—Pakistan may decide not to join the CTBT or a global or regional fissile materials production ban, especially if it feels threatened by the US-India strategic partnership and the loss of strategic depth in Afghanistan.

13 Under international law, the Line of Control (LOC) in Kashmir is not a legitimate international border. India interprets the 1972 Simla Accord as establishing a permanent border, but the agreement only says that the LOC will be respected by India and Pakistan, until they can arrive at a final settlement of the Kashmir dispute.

The major obstacle for a final settlement of the Kashmir dispute and achieving meaningful progress toward a nuclear arms control and disarmament regime in South Asia is the so-called 'war on terror'; a war without end that coupled with the US-India strategic alliance emboldens India to frame the Kashmir dispute as a purely 'terrorism problem' and increases Pakistan's insecurity as India diverts more of its domestically produced nuclear fuel to the weapons program thanks to the nuclear deal with the United States. The good news is that the United States and India have a common interest in preventing Pakistan from becoming a 'failed state'; and India has an interest in achieving a permanent settlement of the Kashmir dispute with Pakistan in order to project itself internationally as a great power. Gaining great power status recognition from the United States and the other major powers is the main reason India decided to carry out the May 1998 nuclear tests.

Conclusion: Indo-Pakistani Nuclear Relations and the Future International Nuclear Order

After the May 1998 Indian and Pakistani nuclear tests, there was a 'rather strong support' among scholars and policy-makers 'for the global nuclear order in its present form' (Bajpai 1999b, 29). What a difference ten years make! The NPT–centered International Nuclear Order is now in trouble and its future is uncertain; mostly because of the unilateralist policies of the Bush administration (see Chapter 5).

A critically important intervening variable to determine which of the three international nuclear orders comes into existence is the Obama administration's South Asia policy. The Bush administration was so eager to engage India that it looked like an overanxious suitor during the nuclear deal negotiations in 2005–2008. The Obama administration has an opportunity to achieve a more balanced—no longer obsequious—relationship with New Delhi; so that Indian nuclear diplomacy helps to achieve scenarios 2 (a more just INO) and 3 (a disarmament-oriented INO), rather than scenario 1 (a more discriminatory INO). The Obama administration has promised to secure US Senate ratification of the CTBT, and then launch a diplomatic effort to bring onboard other states whose ratifications are required for the treaty to enter into force, including India. Yet even if India and Pakistan ratify the CTBT, a bolder US diplomatic effort would be required to establish a nuclear arms control and disarmament regime in South Asia, moving from the current policy of crisis management to conflict resolution, and—if necessary—international mediation in the Kashmir dispute. The Indian and Pakistani nuclear weapons programs have a dynamics of their own; there is a nuclear and missile race, and—as I have shown in the preceding chapters—there are reasons to believe that nuclear deterrence is an impossible game. If Obama implements his promise to move toward global nuclear disarmament, India will be under enormous pressure to freeze the production of fissile materials for nuclear

weapons. However, in the absence of a global FMCT, India could still refuse to negotiate a bilateral fissile materials cutoff regime with Pakistan.

What will it take for nuclear arms control diplomacy to make significant progress in South Asia? A warming of relations between India and Pakistan (the 'new beginning' proposed by former Prime Minister Vajpayee to the Pakistanis during his historical visit to Lahore in February 1999) would certainly help. However, the history of Indo-Pakistani relations is full of new beginnings that ended in failure and an increase in tensions. A recent example is the suspension of the 'composite dialogue' after the terrorist attack in Mumbai in November 2008. On the other hand, a final settlement of the Kashmir dispute is not a prerequisite to start nuclear arms control negotiations, because both sides have a paramount interest in avoiding a nuclear catastrophe. Neither India nor Pakistan decided to pursue a nuclear weapons program because of the conflict in Kashmir, and it should be possible to de-link nuclear arms control from the Kashmir issue.

India and Pakistan will not take serious steps toward nuclear arms control until open domestic democratic debates on the nuclear issue change the terms of the nuclear debate, that has been dominated in India by a pro-nuclear 'strategic elite' (Frey 2006). India's decision to test nuclear weapons was made by a small group of security analysts and nuclear scientists that benefited from the nuclear tests (Abraham, 1998) and was not preceded by a public debate. An open and comprehensive democratic discussion on nuclear issues could challenge the apparent intellectual consensus created by pro-bomb advocates and think tanks in India and Pakistan. Surveys done on both countries show that 'a growing number of people want the two countries to coexist as normal neighbors' (Dixit, 1999, 464). During the Nehru and Indira Gandhi administrations the Congress Party elite (the dominant political party in India) was skeptical about the utility of nuclear weapons. Indira Gandhi told Rodney Jones that nuclear weapons 'only bring danger where there was none before' (quoted in Perkovich 1999, 178). The post-tests 'popular consensus' in favor of the atomic bomb (conveyed by CNN images of people dancing in the streets of major Indian cities) is more apparent than real. 'Within two months of the tests, a clear majority of people polled spoke against the Bomb. As many as 72.8 percent said India must not make, deploy, or use nuclear weapons' (Bidwai and Vanaik 1999, 270). There is an active anti-nuclear movement in India (Bidwai and Vanaik 1999, 270–273) that organized massive antinuclear demonstrations after the May 1998 nuclear tests. That nuclear weapons have not improved the security of the Indian people was dramatically shown by the 26–29 November devastating terrorist attacks in Mumbai. India is spending billions of dollars in its nuclear weapons program, but its security forces are 'spectacularly unprepared' to respond adequately—much less prevent—Mumbai-like terrorist attacks (see Worth 2008).

In Pakistan, there is a stronger domestic consensus in favor of the Bomb, and the major political parties have managed to identify the Pakistani nuclear arsenal with 'national sovereignty' against the 'Indian threat'. The existence of a military regime until January 2008 made it more difficult to open a democratic debate.

Despite the fragility of the Zardari regime (the Pakistani military is still the power-behind-the-scene) the return to democracy may create the conditions for a critical discussion in the media on the disadvantages of going nuclear. Some Pakistani analysts have started questioning the nuclear program and the deterrent value of nuclear weapons (see Ahmed 1998, 72–74). However, India holds to a certain extent the key to open up the nuclear debate in Pakistan, because serious non-proliferation commitments by India (e.g., joining the CTBT) would weaken the arguments of Pakistani nuclear proponents and erode public support for the bomb in Pakistan, once critical discussion of nuclear weapons shows that nuclear war is, as Mustafa (2002) puts it, 'an insane option'.

It may take a new generation of Indian and Pakistani leaders, free from the historical wounds of partition and the shackles of old thinking, to untie the Gordian knot created by the Indian and Pakistani nuclear tests of May 1998. A pro-active US policy under the Obama administration, taking an active role in resolving the Kashmir dispute and bringing nuclear nonproliferation back in to US policy toward the region would make a big difference. Yet in the end, the South Asian rivals must settle their outstanding disputes by themselves. Can they overcome the spiral of mistrust that makes it so difficult to maintain an enduring peace process in the subcontinent? As Chari (2003, 152) notes:

> Dialogue between India and Pakistan has only taken place fitfully and in a serendipitous manner; more disconcertingly, the belief is entrenched within the Indian establishment that Pakistan seeks dialogue only to impress the international community, as the failure of the Lahore and Agra initiatives taken by India highlights. Mistrust, in short, comes in the way of dispelling mistrust and restoring confidence between India and Pakistan.

Can the Indo-Pakistani 'composite dialogue' be revived after the paralysis provoked by the terrorist attacks in Mumbai in November 2008? The restrained Indian response and Pakistan's efforts to curb militant groups, (including Lashkar-e-Taiba, the one suspected of conducting the Mumbai attacks) are encouraging. Yet the structural obstacles for a lasting reconciliation between India and Pakistan remain in place. The war on terror's collateral damage to Indo-Pakistani relations is also an obstacle, considering that it is a 'war without end' and that 'an increased US presence in South Asia is not intrinsically stabilizing' (Nayak 2002, 6). On the other hand, the growing international movement for negotiations on nuclear abolition is driven by a realization that with nuclear weapons and fissile materials more widely available, the danger of nuclear terrorism has dramatically increased worldwide; the South Asian nuclear predicament is also a global predicament.

The fatalism of the conventional wisdom (the Indian and Pakistani bombs are now 'water under the bridge' and the United States 'must' accept the nuclearization of the subcontinent) must be rejected as a form of intellectual blackmail. It is important to think about the denuclearization of South Asia even if it is not feasible in the immediate future and even if the ruling elites in India and Pakistan

claim that giving up the bomb is 'out of the question'. The existence of strong pro-nuclear lobbies in India and Pakistan should not be an obstacle to making the case for nuclear disarmament in South Asia. Those who argued in favour of denuclearization in Argentina, Brazil, and South Africa were also accused of being naïve wishful thinkers before those countries renounced nuclear weapons. A domestic consensus in favour of the bomb may change. If the nuclear disarmament movement in India can achieve a 'critical mass' so that it can have an impact on actual policy, the combination of external pressure from the United States and the global abolitionist movement and a change in the domestic discourse on nuclear weapons ('nukespeak') could make nuclear rollback possible in India.

Nuclear weapons as symbols of national pride and greatness confer domestic legitimacy to the Indian and Pakistani nuclear weapons programs. Perkovich (1999, 459–64) has argued that democracy reduces the likelihood of states rolling back or significantly constraining nuclear weapon programs. Yet he recognizes that 'Brazil and Argentina represent at least partial counterexamples' to his argument. In both countries, the democratization of the early to mid-1980s deprived the nuclear weapon-option of legitimacy, as it came to be associated with the authoritarian abuse of power during the military regimes of the 1960s and 1970s. Could a similar fundamental shift occur in South Asia? In India, nuclear decision making is surrounded by secrecy, but it has been a functioning democracy—with a brief interregnum in the late 1970s—since becoming independent from Great Britain in 1947. India's political leadership is highly sensitive to public opinion. If there is an open democratic debate on the bomb, the 'fallacy of an Indian deterrent' (Bajpai 1999a) could come to light; and there could be a popular backlash against the bomb when it becomes clear that it does not make Indian citizens more secure and it can bring about national and regional annihilation.

In explaining the rationale for the nuclear deal with the United States, Indian Prime Minister Manmohan Singh told Charlie Rose that the nuclear deal 'would be a great contribution of President Bush to ending India's isolation from the world nuclear order' (Rose 2006, 4). What did he mean? Was India now part of the much-despised NPT nuclear order, with its distinction between nuclear-haves and nuclear have-nots? After being accepted as a member of the nuclear club, India seems to go along with the narrow approach to non-proliferation promoted by the Bush administration, making the distinction between 'good' and 'bad' proliferators. For example, at a crucial meeting of the IAEA Board of Governors India supported the submission of the Iranian case to the UN Security Council. However, Indian Prime Minister Manmohan Singh has also declared that by signing the nuclear deal, India had now joined a 'new nuclear world order' (quoted in Schell 2007, 78). As we have seen, if it fully comes into existence, this new INO will be even more unfair and discriminatory than the NPT regime.

Whether a new, more discriminatory INO comes into existence will significantly depend on India's foreign policy behavior. If India makes a second 'nuclear U-turn' and returns to a Nehruvian anti-nuclear diplomacy (see Hymans 2006, 173–75) while implementing the nuclear deal with the United States, the prospects

for a new NPT, as the linchpin of a disarmament-oriented INO would be greatly enhanced; especially if the Obama administration abides by its commitment to take serious steps to realize the vision of a nuclear weapons free world. However, Obama has also declared that 'America will not disarm unilaterally' (Arms Control Association 2008, 1), meaning that it is essential to bring India, Pakistan, Israel, and the other four nuclear weapon states on board of the nuclear disarmament bandwagon, while making sure that 'rogue states' do not go nuclear. Obama has also pledged to 'work with other nuclear powers to reduce global stockpiles [of nuclear weapons] dramatically by the end of [his] presidency'. In this scenario, India, Pakistan, and Israel will not be able to continue stockpiling weapons-grade fissile materials without international condemnation.

Former Senator Sam Nunn has described the process of moving toward a nuclear weapons free world 'as climbing a mountain, the top of the mountain being zero nuclear weapons. We need to be heading up the mountain, not down the mountain' (see Kimball and Pomper 2008, 7). The Indian and Pakistani nuclear tests of May 1998 took the world several steps down the mountain. The Indian and Pakistani political elites need to recognize that it was a mistake to seek security with nuclear weapons; and take the first steps to head up the mountain, so that their children and grandchildren can see the top of the mountain. Even if nuclear weapons return to center stage in world politics due to the failure of the United States to live up to its nuclear disarmament commitments, India and Pakistan have enough incentives to master what they have unleashed, implementing the Lahore Declaration and Memorandum of Understanding (MoU) of February 1999, until they can put the nuclear genie back in the bottle. Besides the question of cost, the paramount motivation for nuclear arms control is their mutual vulnerability to a nuclear exchange that could destroy their societies. A robust nuclear arms control regime would start removing the nuclear sword of Damocles that is pending over the heads of millions of people in South Asia.

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Index