



The South Asian Bomb

The Politics of South Asia's Nuclear Crisis

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After 50 years of independence, yet impoverished by an unremitting arms race, the people of India and Pakistan now confront a dangerous future in the shadow of the bomb. The nuclear peril is sharpened by a history of armed conflict over Kashmir and a contiguous and contested border that makes accidental and unintentional war a real possibility. While grappling with each other, Indian and Pakistani policy makers see two different sets of issues at work. For India, the struggle has been to find its place in a world dominated by nuclear weapon states. Pakistan, for its part, has been intent on maintaining some kind of parity with India. Having worked so hard to acquire nuclear weapons and with large right wing constituencies in both countries supporting them, it is unlikely that either state will renounce its weapons in the absence of global nuclear disarmament. [M&GS 1998;5:78-85]

The half century of Indian and Pakistani independence has been marked by three wars, a conventional arms race, and the determined development of nuclear weapons and missiles. Now both states have openly tested nuclear weapons and have announced their capacity to deploy them. The decades of conflict and enmity have ensured that policy makers in India and Pakistan—and significant sections of public opinion—are unwilling to compromise over the supposed differences between the two

states. For many, possession of nuclear weapons means there is now even less reason to compromise. Thinking themselves safe behind their "nuclear shield," their practice of intervening in the violent conflicts in each other's countries may continue and possibly escalate. This leads to the danger of war erupting by accident, by misadventure (as it did in 1965), or through escalation (as happened in 1971). This time the outcome could be nuclear war.

The future is grim. A hard line Hindu nationalist government, in power in India for the first time, and a Pakistani government struggling with a collapsing society and economy make even détente unlikely in the near term. Mired in seemingly endless crises and with their mega-cities only a three-to-five-minute missile flight time away, the people of India and Pakistan face a nuclear future with no time to think and no place to hide.

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A South Asian Arms Race

The emergence and consequences of nuclear weapons in South Asia can only be understood in the context of a history of hostility punctuated by war. But such enmity is not self-sustaining. The experience of the cold war between the US and the former Soviet Union shows how in modern times a military confrontation between states becomes a competition in which technological rivalry leads to new weapons on one side and then the other. As the process of competition becomes a systemic feature in the relation between the two states, they start to replicate each other's practices and organizational structures. Powerful interests grow that are fostered by this state of permanent confrontation and they ensure that the conditions for their continued well being are ever-present. No one has described this process of maintaining and shaping, if not manufacturing, enmity better than the late E.P. Thompson: "the armourers excite the other's armourers, the hawks feed the hawks, the ideologists rant at each other like rival auctioneers, and the missiles copulate with each other, and breed on each others' foul bodies the next generation of missiles" [1].

The history of military spending by India and Pakistan over time strongly suggests a causal connection. From 1958 to 1973 Indian military spending seems to have triggered increasing Pakistani military spending. Then, as Pakistan caught up, India increased military spending still further in an attempt to maintain military superiority [2]. The nuclear tests have not changed this dynamic; after its tests India announced a 14% increase in military spending, with possibly an additional increase later in the year [3] and Pakistan followed with an 8% increase [4].

During these decades of arms racing, India and Pakistan have acquired some of the most extensive and sophisticated armed forces in the world (Table 1).

Military Buildup: Paying the Price

In recent years, Pakistan's military expenditure has typically been about one-third that of India. The smaller size of Pakistan's economy has meant that its annual military spending now exceeds \$3 billion—about a quarter of its total government expenditure—and consumes about 5% of its gross domestic product (GDP). India's \$13 billion annual military budget consumes almost 3% of its GDP. Finding the resources for maintaining such a drain on resources has been, and will continue to be, an increasingly acute problem for Pakistan in particular, given a total debt equal to 93% of its GDP and a growing debt service that currently is nearly \$5 billion (significantly greater than its mil-

itary spending). The situation has reached a point, as of August 1998, that Pakistan is facing a shortfall of 70 billion rupees (just over \$1 billion) simply trying to meet defense needs and debt service [5].

With budget deficits on the order of 6-9% of GDP for more than a decade and pressure to control the deficit from the International Monetary Fund and other creditors, Pakistan's government has restricted development spending rather than reduce the military budget. In fact, 1990 was the last year when military spending equaled the allocation for the annual development program. Since then, development spending has fallen as compared to military spending. It is thus no surprise that in the United Nations Human Development Report's aggregated measure of the quality of people's lives in different countries, the Human Development Index, Pakistan slipped from number 120 in 1992 to 128 in 1995 and now is ranked 138 (India is at number 139) [6]. One could argue that this catalog of suffering and neglect is due simply to poverty and has little if anything to do with high military spending. Comparative studies by UNICEF make this explanation unlikely. For example, given their respective per capita gross national products, the level of child malnutrition (the percentage of children under five years of age who are underweight) should be 30% for India and 27% for Pakistan [7]. As seen in Table 2, they are 53% and 40% respectively.

Attributions of Responsibility

The concentration on military security in Pakistan has often been attributed to the experience of three wars with India, and the need to counter what is seen as Indian hegemonic ambitions. General Mirza Aslam Beg, a former Chief of Pakistan's Army Staff, describes Pakistan's position as a response to "geopolitical ambitions emanating from the deeper recesses of the Hindu psyche" [8]. This argument is advanced despite the obvi-

Table 1: Selected military statistics for India and Pakistan, 1996-1997*

	<u>India</u>	<u>Pakistan</u>
Active armed forces	1,145,000	587,000
Tanks	3,500	2,050
Artillery	4,355	1,820
Aircraft carriers	2	0
Submarines	19	9
Destroyers and frigates	24	11
Attack helicopters	309	32
Combat aircraft	846	434

*The Military Balance 1996/1997, International Institute for Strategic Studies, London, 1996

Table 2: Human development indicators for India and Pakistan.

	India	Pakistan
life expectancy, years	61	62
infant mortality rate, per 1,000 births child (under 5 years old)	79	95
mortality, per 1,000 births	119	137
malnourished children, %	53	40
without access to health services, %	15	45
without access to safe water, %	25	50
without access to sanitation, %	71	67
literacy rate, %	51	36

Source: Haq. M., *Human Development in South Asia 1997*, Oxford University Press, Karachi, 1997

ous fact that Pakistan is substantially responsible for starting all three of the Indo-Pakistan wars. Two of these wars have been over the status of Kashmir [9]. The first war came almost immediately after partition and independence in August 1947. The conflict was over Kashmir, an Indian kingdom with a Muslim majority bordering both India and Pakistan, where the Hindu prince chose to accede to India rather than let the territory go to Pakistan. Pakistani forces invaded Kashmir and eventually managed to take control of about one third of the disputed territory. India took the rest. The second war came in 1965, after Pakistan attempted, and failed again, to end Indian rule in Kashmir by infiltrating its armed forces into the area and trying to incite a Kashmiri uprising.

The most common reference in Pakistan to Indo-Pakistan conflict, however, is to the 1971 war, which followed a civil war in which the Pakistani army ruthlessly attempted to crush an independence movement in East Pakistan [10]. India took advantage of the situation by intervening militarily in support of Bangladeshi independence. Following this intervention, the Pakistani armed forces surrendered and there were more than 90,000 prisoners of war. East Pakistan became the independent state of Bangladesh. In a truancy of history, this war is now described in Pakistan as "India dismembering Pakistan."

Perhaps more significant than these wars in shaping Pakistan's militarized sense of security is its history of extended periods of military dictatorship. The first period, under Field Marshal Ayub Khan and then under General Yahya Khan, lasted from 1958 to 1971. The second began with a coup staged by General Zia-ul-Haq in 1977, and lasted until 1985. During these periods, which were strongly supported and financed by the US because of the willingness of these military leaders to play a proxy role in the Cold War,

the Pakistani military institutionalized its role in determining policy. A legacy of military rule has been the use of the state-controlled media and educational system to sharpen a widespread, almost existential, sense of a competitive and insecure nationalism with regard to India [11,12]. This, in turn, has created a demand for military preparedness.

The motivations that have prompted successive Indian governments to pursue high levels of military spending are more difficult to disentangle. A Chinese "threat" is often put forward, based on the border war with China in 1962, which India lost. Prior to this war, however, India and China had very good relations, and they have been making significant efforts in recent years to resolve their territorial issues. In 1993 an "Agreement on the Maintenance of Peace and Tranquillity Along the Line of Actual Control in the India-China Border Areas" was signed, and this was followed up with a 1996 agreement on military confidence building measures, which included reductions in the numbers of troops, tanks, infantry combat vehicles, heavy artillery and missiles deployed by both states along the border.¹

Echoes of the Monroe Policy

A second explanation for large Indian military expenditures is that they enable a policy to project military power throughout the region [13]. Echoing the famous "Monroe Doctrine," by which the US laid claim to the entire Western hemisphere as its "sphere of influence," this has been dubbed the "Indira doctrine," after Prime Minister Indira Gandhi. It is taken to mean that Indian policy is based on treating the larger South Asian region and the Indian Ocean as an Indian sphere of influence.

A number of instances suggest that such a policy is at work [14]: the forcible annexation of Goa in 1962; the 1975 incorporation into India of the kingdom of Sikkim, overturning an earlier treaty giving it rights and autonomy; and interventions in neighboring countries. Apart from the intervention in Pakistan's civil war that led to an independent Bangladesh in 1971, the most significant of these occurred in 1987 when India and Sri Lanka signed an accord whereby the India army was made responsible for keeping the peace in Sri Lanka, and Sri Lanka agreed to Indian control over its foreign and defense policy. Indian commandos were sent in to put down an attempted coup in the Maldives in 1988. In 1989 India imposed a trade embargo against Nepal, closing off all access as a

1. A useful source of information about these agreements is the Henry L. Stimson Center Website: <http://www.stimson.org/cbm/sa>.

form of punishment for allegedly trying to import weapons from China.

The Impact of Independence

The colonial conquest of India by European powers equipped with modern weapons and navies able to dominate the Indian Ocean must also be taken into consideration. By the time of Indian independence in 1947, the first nuclear weapons had already been used. The Cold War began soon afterwards. With the US and the Soviet Union coaxing and coercing newly independent states to their respective sides, Prime Minister Nehru asserted Indian non-alignment, because "once foreign relations go out of your hand into the charge of someone else to that extent and in that measure you are not independent" [15.] Repeated US interventions in third world countries, its presence in the Indian Ocean, and especially its military support for Pakistan, including the dispatch of the aircraft carrier Enterprise into the Bay of Bengal during the 1971 war, have combined to establish a sense that India must be prepared to look after itself.

Against this background the nuclear arms race in South Asia can not be understood simply as analogous to the bilateral superpower arms race, with India and Pakistan standing in for the US and the USSR respectively. Nor have India and Pakistan built nuclear weapons largely to retain a once significant political role in world affairs, as seems to have been the case with Britain [16] and France [17]. There is even less ground for a comparison with China, which went nuclear in part as a response to American threats to use nuclear weapons against it in the early 1950s [18].

The complexity in South Asia arises from the fact that Indian and Pakistani policy makers, while grappling with each other, see two different sets of issues at work. The interplay between these perspectives has created a nuclear crisis that is simultaneously global, continental, and regional. For India, the problem of nuclear weapons begins as a global problem about India's place in the world and is brought closer to home by the role of the nuclear weapons powers—in particular China and, most recently, Pakistan. For Pakistan, the crisis begins and ends with India. Pakistan's relations with China and the rest of the world are important in so far as they help Pakistan address its conflict with India.

The Long Road to Nuclear Weapons in South Asia

A reference to a military role for atomic energy in an Indian context predates inde-

pence. Speaking in Bombay on 26 June 1946 (barely a year after the American destruction of Hiroshima and Nagasaki with nuclear weapons), Jawaharlal Nehru, who became the first Prime Minister of India, said:

As long as the world is constituted as it is, every country will have to devise and use the latest scientific devices for its protection. I have no doubt India will develop her scientific researches and I hope Indian scientists will use the atomic force for constructive purposes. But if India is threatened she will inevitably try to defend herself by all means at her disposal [19].

Keeping Up With the West

There were calls from the extreme right of Indian politics, starting from the early 1950s, for India to develop nuclear weapons, particularly from the party that was the forerunner to the Bharatiya Janata Party (BJP) currently ruling India. But for the larger Indian policy making establishment the aim was to create a large nuclear complex because, as Prime Minister Nehru put it, India had "to remain abreast in the world as a nation" [19]. India was competing with the leading industrial and military powers in the world, all of whom had started nuclear power programs and some of whom had started nuclear weapon programs. Keeping up meant keeping open an Indian nuclear weapons "option" [20]. One can therefore argue that the nuclear weapons program, like the nuclear power program, was part of a larger structure of Indian elite thinking about the need for India to be seen as "modern," rather than as just another poor, underdeveloped former colony, and as "strong," that is, as a state with a significant international role at the global level.

India's defeat in the 1962 border war with China increased the pressure, especially from right wing political parties, for an Indian nuclear weapon program. India's nuclear scientists seemed to throw their weight behind such a goal following the first Chinese nuclear explosion in 1964. Speaking on All India Radio, Homi Bhabha, the founder and head of the Indian Atomic Energy Commission, claimed that India could build its own bomb within eighteen months [19]. Despite pressure from the right

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wing and the scientists, India did not immediately build a bomb and did not test a nuclear weapon until 1974.

The Decisions to Test: 1974, 1998

The reasons for the eventual decision to test can be inferred from the way the decision was made and its timing. Prime Minister Indira Gandhi apparently made the decision with a small group of advisors that included nuclear weapon scientists but no military or foreign policy officials [20]. In the two years prior to the test Mrs. Gandhi's government faced one crisis after another, including a widespread drought, financial scandals involving senior politicians, high inflation, massive strikes by workers, and growing public opposition that was becoming more organized [21]. There were at that time no significant foreign policy issues with either China or Pakistan. In fact, following its decisive victory in the 1971 war with Pakistan, India was by far the dominant South Asian power. India's first nuclear weapon test was seemingly determined, therefore, by domestic political factors rather than by national security concerns.

In the early 1990s the same constellation of forces started to become visible again. In 1994, as Indian politics fractured into large, contentious, multi-party coalitions, and the extreme right wing Hindu nationalist BJP made major electoral gains, the head of India's Atomic Energy Commission gave an interview in which he talked about India having had a "moratorium" on nuclear testing since 1974. A year later there were reports of efforts to prepare India's nuclear test site and some speculation that India might test in the near future, especially if the BJP came to power [22]. Within days of forming a government in April 1998, with the BJP as the largest party in a very unstable coalition, Prime Minister Atal Behari Vajpayee decided to carry out nuclear tests. As in 1974, the decision was taken by a small group around the Prime Minister and the Indian Cabinet was only told after the event [23].

Prime Minister Vajpayee has offered a number of reasons for India's nuclear tests. In his letter to US President Clinton, he said the tests were a response to the "deteriorating security environment, specially the nuclear environment, faced by India for some years past" [24]. The reference here is clearly to China and China's support for Pakistan's nuclear weapons program. But in an interview a few days later with an Indian magazine Vajpayee declared "I have been advocating the cause of India going nuclear for well over four decades... India has the sanction of her own past glory and future vision to

become strong—in every sense of the term" [25]. Vajpayee's demands that India possess nuclear weapons thus substantially predate both China's and Pakistan's nuclear weapons programs. Speaking in Parliament, he said "India is now a nuclear weapons state... It is India's due, the right of one-sixth of humankind" [26].

Matching India's Capability

Pakistan's nuclear trajectory is much less complex. From the country's inception, Pakistani policy makers have sought ways to create and maintain some kind of strategic "parity" with India in almost every aspect of state policy. Throughout the late 1950s and 1960s Pakistan joined a number of US-led Cold War military alliances simply as a way to gain this "parity" [15]. Starting in the early 1960s, speculation about possible Chinese and Indian nuclear weapons programs led to calls from some politicians, especially Zulfikar Ali Bhutto, who was then a minister in the military government, for a matching Pakistani capability. Speaking in Pakistan's parliament soon after the 1974 Indian nuclear test, now-Prime Minister Bhutto revealed that the government first "discussed seriously" whether it should build nuclear weapons in 1963 [27].

Wider discussions about a Pakistani nuclear weapon program were stirred by the 1965 India-Pakistan war, towards the end of which there were reports that India was only 10 months away from a nuclear test [28] and demands that Pakistan should pursue its own nuclear weapons program [29]. The speculation about a 10 month horizon may have been based on nothing more than Bhabha's speech less than a year earlier. Pakistani nuclear scientists were no more silent than their counterparts in India. The official journal of the Pakistan Atomic Energy Commission argued:

The recent war, inflicted by India on us, has shown once again, that even the best intentions can lead one to the battlefield... We as scientists shoulder a rather special responsibility: we have accepted the challenge of atomic energy and we must now try to prove ourselves equal to the task, be it peace or war [30].

The decisive moment seems to have come following Pakistan's defeat in December 1971. Zulfikar Ali Bhutto, who had been demanding that Pakistan have nuclear weapons since the early 1960s, took power, called his country's nuclear scientists together, and asked if they could build a bomb [31].

The response was largely enthusiastic and a bomb program was set up. It was not, however, a crash program: nothing much seems to have happened in the first few years. Only after India's 1974 nuclear explosion did resources start flowing into Pakistan's bomb program.

Fissile Materials

Having failed in its attempt to follow India down the plutonium path to nuclear weapons, Pakistan turned to uranium enrichment as a way to produce fissile material. In 1992 Pakistan's foreign secretary confirmed that Pakistan had the components to assemble at least one nuclear weapon, but that production of nuclear weapons grade uranium had been frozen [32]. Pakistan may now have accumulated enough highly enriched uranium for 16 to 20 bombs. India, by comparison, may have enough fissile material for about seventy [33].

Pakistani policy makers seem to have treated India's nuclear tests on May 11 and 13 as both a challenge and an opportunity. The challenge was thrown down within a few days of the Indian tests by L.K. Advani, India's Home Minister and a BJP hardliner, who declared that Pakistan "should realize the change in the geo-strategic situation in the region and world [and] roll back its anti-India policy, especially with regard to Kashmir" and that India "is resolved to deal firmly with Pakistan's hostile activities in Kashmir" [34]. Pakistan's response was given by its prime minister after the tests when he said "We have adopted the path of independence instead of slavery" [35]. India's tests presented Pakistan with the opportunity finally to establish and to demonstrate that its nuclear weapons would work. Prime Minister Nawaz Sharif is reported to have explained after the tests that "there was a lot of pressure from Pakistani scientists to test the nuclear capability and India provided them the opportunity" [35].

As for the tests themselves, Indian nuclear weapons scientists claim that they tested a 15-kiloton fission weapon (i.e. about the size that destroyed Hiroshima), a two-stage 45-kiloton thermonuclear weapon (i.e. a hydrogen bomb), and low-yield tactical nuclear weapons. Abdul Kalam, the head of India's Defense Research and Development Organisation (DRDO), said "The process of weaponisation is complete" [36]. Pakistan's nuclear weapons scientists claim to have tested fission weapons, including one with a yield of up to 40 kilotons, and claim the capability to test a hydrogen bomb [37].

The Nuclear Future

Even before the nuclear tests, there was increasing evidence that both India and Pakistan were expanding their capabilities to produce fissile material for nuclear weapons. India's fissile material of choice, plutonium, is obtained by reprocessing spent fuel from its unsafeguarded nuclear reactors. India is constructing additional unsafeguarded reactors and reprocessing plants for extracting plutonium. It is also setting up uranium enrichment facilities that will give it access to another source of fissile material [38]. The Department of Atomic Energy announced a 68% budget increase after the nuclear tests [39]. Pakistan had suspended the production of highly enriched uranium in the early 1990s, hoping to avoid or alleviate US sanctions, which were imposed anyway. It has also built a reactor specifically for producing plutonium—the first Pakistani reactor not under international safeguards [38]. Pakistan has presumably resumed uranium enrichment following its tests.

The Missile Race

India and Pakistan have also been investing in missiles. India has an extensive missile program, which includes the short-range Prithvi (with a range of 150-350 km) and the intermediate range (1200-2400 km) Agni ballistic missile. Both missiles can, in principle, be fitted with nuclear warheads [40]. Pakistan has responded by building its own short-range Hatf missiles and a new long range Ghauri missile, first flight tested in April 1998 with a range of 1,100 km, and by purchasing some Chinese M-11 missiles with ranges of a few hundred kilometers [41].

If these missiles are deployed, they need only cross the contiguous border and travel a few minutes at most before reaching a city in the other country. Warning and response times will be measured in no more than a few minutes. Geography also ensures that aircraft pose a similar danger. In late May 1997, an Indian MiG-25 jet fighter reportedly crossed the border and flew towards a Pakistani city, where it went through the sound barrier before flying back. Pakistan was unable to respond [42].

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A World of Risks

The nuclear danger to the people of South Asia does not necessarily begin with nuclear weapons. Pakistan's armed forces

perceive a significant conventional military imbalance with respect to India. Military planners may see Pakistan's small nuclear arsenal as vulnerable even to a conventional attack and they may resort to a strategy of launch-on-warning. The poor quality of information from the early warning systems available to Indian and Pakistani military commanders means that any warning of an attack would be undependable at best. In such circumstances, accidental nuclear war becomes a real possibility. According to Pakistan's former chief of army staff, "Pakistan and India may neither have the resources nor the capability to develop [an early warning] system for ensuring nuclear safeguards and security" [43]. India's prime minister has declared that his government "does not intend...to create an elaborate command and control system like other nuclear weapons powers" [44].

Kashmir

The Kashmir border is the obvious place where things can begin to go wrong. India's attempts to crush a decade long armed struggle for Kashmiri freedom, combined with Pakistan's covert support of the militants, has already produced as many as 40,000 deaths [45]. In the aftermath of the tests, tension has increased over Kashmir, where the conflicting armies shell each other and the local population with seeming abandon.

The fear over a conflict in Kashmir has been heightened by increasing Indian determination to crack down on the Kashmiri militants. In response to the August 1998 US cruise missile attacks in Afghanistan and Sudan, justified by US officials as attacks on sites used by groups they claim to be "terrorists," Prime Minister Vajpayee said he hoped this meant that "wherever there was terrorism, against anybody, we will have to fight it" and that "double standards will not be applied" [46]. Such sentiments are matched by hawks in Pakistan. Even before the nuclear tests General Hamid Gul, the former head of Inter-Services Intelligence, the country's most powerful intelligence agency, said: "We have come to the brink on Kashmir, which is sitting on a powder keg of conventional and non-conventional weapons and we have little choice left, but to go to war" [47].

Even if India and Pakistan agree to US demands, echoed by the international community, that they sign the Comprehensive Test Ban Treaty—both have already agreed to negotiations on a Fissile Material Cut-Off Treaty—it will do nothing to address the longer term dangers. The enmity will remain, as will the large armies, now equipped with

tested nuclear weapons and the missiles and aircraft with which to take them to their targets. The Kashmir dispute will overshadow everything. Irresponsible politicians in both countries will remain willing to exploit crises for public support. Even if Indian and Pakistani policy makers realize the dangers and come to an understanding not to deploy their nuclear weapons for the present, such an agreement could well unravel come the next crisis.

Conclusion

Given the different motivations for developing nuclear weapons at work in India and Pakistan and the powerful institutional interests that have grown up around them—to say nothing of the enormous public support for these weapons—there is no question of South Asia renouncing nuclear weapons unless there are substantial moves toward global nuclear disarmament. Pakistan's policy makers have repeatedly committed themselves to keeping nuclear weapons as long as India has them. Neither the present nor any future Indian government is likely to give up its nuclear capability as long as there are other nuclear weapon states. The nuclear weapon states, for their part, resolutely refuse even to consider negotiations on a convention eliminating nuclear weapons. The global nuclear climate must begin to change. The alternative is an increasingly entrenched nuclear confrontation in South Asia and an ever present danger of nuclear war.

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