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Toward Pokhran II: Explaining India's Nuclearisation Process

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Introduction

The basic objective of this paper is to assess India's acquisition of nuclear weapons in light of the general debate why states 'go nuclear' and build nuclear arsenals. In general, analysts proffer four arguments about proliferation of nuclear weapons. They are: (1) security concerns; (2) prestige; (3) technological imperatives; and (4) domestic politics.[1] The first posits that security concerns directly related to a state's physical security and survival might drive a state to acquire nuclear weapons. A state, when operating in an environment of anarchy and acute security dilemmas, remains very concerned with national security and survival. Depending on the intensity of security dilemmas, states often resort to developing lethal military forces, including, in some instances, nuclear weapons. For example, the 'first generation' nuclear powers (the USA, the USSR, the UK, France and

[1] For a general discussion on the causes of nuclear weapons proliferation, see Lewis A. Dunn and William H. Overholt, 'The Next Phase in Nuclear Proliferation Research,' *Orbis,* Vol. 20, No. 2 (Summer 1976), pp. 497–524; William Epstein, 'Why States Go—And Don't Go—Nuclear,' *The Annals of The American Academy of Political and Social Science,* Vol. 430 (March 1977), pp. 16–28; Lewis A. Dunn, *Controlling the Bomb* (New Haven: Yale University Press, 1982); William H. Kincade and Christoph Bertram ed. *Nuclear Proliferation in the 1980s: Perspectives and Proposals* (London: McMillan, 1982); Stephen M. Meyer, *The Dynamics of Nuclear Proliferation* (Chicago: University of Chicago Press, 1984); Bradley A. Thayer, 'The Causes of Nuclear Proliferation and the Utility of the Nuclear Nonproliferation Regime,' *Security Studies,* Vol. 4, No. 3 (Spring 1995), pp. 463–519; Tanya Ogilvie-White, 'Is There a Nuclear Proliferation Debate? An Analysis of the Contemporary Debate,' *The Nonproliferation Review,* Vol. 4, No. 1 (Fall 1996), pp. 43–60; Scott D. Sagan, 'Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb,' *International Security,* Vol. 21, No. 3 (Winter 1996–97), pp. 54–86; Scott D. Sagan, 'The Causes of Nuclear Proliferation,' *Current History,* Vol. 96, No. 609 (April 1997), pp. 151–6; Bhumitra Chakma, 'Proliferation of Nuclear Weapons: The Conceptual Debate,' *BIISS Journal*, Vol. 22, No. 3 (July 2001), pp. 334–53.

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China) and the 'second generation' nuclear states (India, Pakistan etc.) acquired nuclear weapons because they each faced an acute security threat from a strategic adversary.

The second argument holds that nuclear weapons act as a symbol of prestige for a nation, which tempts a state to build a nuclear arsenal. Building of nuclear weapons, according to this view, bestows great power status or international recognition upon a state. Such status may result from the military power nuclear weapons inherently add, from scientific and industrial strength associated with nuclear forces and from the increased great power attention that nuclear or 'threshold' nuclear states may receive. Britain, France and India are often cited as examples where prestige was an important factor behind their decisions to acquire nuclear weapons. Thirdly, a state's decision to acquire nuclear weapons is an inevitable outcome of technological momentum created by nuclear research and development programmes. A fourth argument holds that intra-bureaucratic politics as well as politicians' drive to score domestic political points may lead a state to the nuclear path. According to this perspective, bureaucrats acting on the basis of their own individual policy preferences or bureaucracies carrying out their specific institutional interests attempt to influence states' decisions to acquire nuclear weapons. Homi Bhabha in the case of India, and Pierre Guillaumat and Pierre Taranger in the case of France are often cited as examples of bureaucrats who had played pivotal roles in the proliferation decision of their particular countries. This argument also holds that politicians at times may decide to go nuclear in order to gain domestic popularity.

This paper argues that various factors influenced India's pursuit of a nuclear development programme, although ultimately it was concern for national security that played the critical role in turning it to a military oriented project. In particular, this article advances the argument that India's choice to pursue a nuclear weapons strategy primarily relates to its perception that its security as a state was best preserved by doing so in a strategic environment dominated by an intractable security dilemma involving itself, China, and, increasingly after 1974, Pakistan. The argument is developed through a focussed historical narrative to explain India's policy perceptions and motivations. This method illustrates the changing contour of India's nuclear policy and postures and analyses the factors that led it down the road to Pokhran I and II. As will be observed, the origin of a national nuclear trajectory in India lay in the formation of a nuclear security dilemma precipitated by the first Chinese nuclear

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test in October 1964. With the modernisation of the Chinese nuclear force, India tentatively contemplated a military nuclear programme, which gradually took a decisive shape in the vortex of an intensifying tripartite nuclear security dilemma in the South Asia region. Of course, India pursued it in a clandestine manner, before advancing an overt nuclear posture in May 1998.

Three distinct phases can be observed in India's nuclear development programme from 1947 to 1998. From 1947–1964, India primarily emphasised the building of a wide-ranging civilian nuclear infrastructure, although it yet had a built-in advantage of defence use and Indian leaders were aware of this fact. Indian leaders conceived such a nuclear programme in terms of economic development, industrial self-sufficiency and well-being of the population. There was no real indication of military implications of the nuclear programme during this period. From 1964–1974, Indians thoroughly debated their own country's nuclear identity, precipitated by the first Chinese nuclear test in October 1964. New Delhi officially adopted a 'nuclear option' policy by refusing to sign the NPT in 1968. This posture produced a 'peaceful nuclear explosion' (PNE) in 1974. From 1974–1998, India pursued a policy of 'nuclear ambiguity'—neither confirming nor denying the pursuance of a nuclear weapons programme or existence of nuclear weapons—before conducting five nuclear tests in May 1998. Simultaneously, however, India strengthened and expanded its nuclear deterrent capabilities during this period as a hedge against the Chinese and growing Pakistani nuclear capabilities.

Phase I: 1947–1964
Politics of Nuclear Infrastructure Building

Origins of India's Nuclear Programme

The origins of India's nuclear programme precede its independence. It started in 1944 with the establishment of the Tata Institute of Fundamental Research (TIFR) and subsequently with the creation of the Atomic Energy Research Committee (AERC) in 1946.

Following independence, the enactment of the Atomic Energy Act (AEA) in August 1948 paved the way for creating the Indian Atomic Energy Commission (IAEC) in place of the AERC, which expedited the process of building an Indian nuclear infrastructure.

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The AEA placed all uranium and thorium reserves in the country under state control and facilitated the conduct of all nuclear research and development activities in 'secret.'[2] The Indian Government created the Department of Atomic Energy (DAE) in 1954 to further stimulate nuclear research and atomic energy development. Prime Minister Jawaharlal Nehru and Homi Bhabha, Chairman of the IAEC, became its first minister and secretary respectively, which underscored that the Indian Government was determined to build the nuclear programme on a priority basis. In addition, the Atomic Energy Establishment, Trombay (AEET, renamed as Bhabha Atomic Research Centre or BARC in 1967) was established in 1954 in order to expedite the building of a nuclear infrastructure. Its primary objectives were to create skilled manpower and basic infrastructure in order to facilitate nuclear R&D and transfer of nuclear technology.[3]

Sustained efforts produced results quite quickly. The endogenously built one-megawatt thermal (MWt) swimming pool type research reactor—the *Aspara* ('Water Nymph')—went critical on 4 August 1956. For India, this breakthrough was important; because it substantially contributed to the subsequent development of its nuclear programme.

India in the initial phase utilised a favourable international environment for atomic research and development to build its nuclear programme. In the 1950s, the general view about atomic R&D was that peaceful use of the atom could solve many of the economic and social problems of humankind.[4] Given such a favourable international

[2] It is noteworthy that the Chairman of the IAEC had the power to formulate and implement policies with regard to country's nuclear programme in 'total secrecy' and was responsible only to the Prime Minister. This power of the IAEC Chairman was enhanced by the reconstitution of the Commission in 1958 and the enactment of the Atomic Energy Act, 1962. It was a clear indication of ambiguity in India's nuclear activities. There was considerable disagreement between Prime Minister Nehru and prominent nuclear scientist Professor Meghnad Saha on nuclear planning and the operation of the IAEC. This disagreement was reflected in the letters exchanged between them during the initial phase of India's nuclear infrastructure building. This author read these hand-written letters in April 1999 that were preserved in the Nehru Memorial Museum and Library in New Delhi. Also on this point, see Dhirendra Sharma, *India's Nuclear Estate* (New Delhi: Lancers Publishers, 1983), pp. 149–50. Criticisms of the lack of accountability in India's nuclear programme can also be found in Itty Abraham, *The Making of the Indian Atomic Bomb* (New Delhi: Orient Longman Limited, 1999).

[3] K.D. Kapur, *Nuclear Non-Proliferation Diplomacy* (New Delhi: Lancer, 1993), p. 226.

[4] For example, the US 'Atom for Peace' initiative is a case in this context. President Dwight Eisenhower in 1953 viewed that if applied peacefully, atoms could

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circumstance and utilising commercial interests of the industrialised countries, India garnered considerable assistance from France, the United Kingdom, Canada and the United States to build its nuclear programme. In particular, Canadian assistance in the initial phase contributed substantially to India's nuclear efforts.[5]

By the early 1960s, India, by vigorous indigenous efforts and with considerable foreign assistance, made substantial progress in building a formidable nuclear infrastructure. More importantly, it had established a technological base, which could allow India to begin a nuclear weapons programme or at least a nuclear explosives project if the need arose. As it turned out to be the case, India indeed launched a nuclear explosion project in November 1965, in the aftermath of the first Chinese nuclear test.

Rise of China Factor, 1962 Sino-Indian Border War

In 1958, China for the first time publicly indicated that it would develop nuclear weapons.[6] The Chinese announcement came out at a time when the Sino-Indian relation was gradually deteriorating, eclipsing the spirit of *Hindi-Chini Bhai Bhai* (Indians and Chinese are brothers). It immediately made an impact on some quarters of the Indian political circles. An indication of this can be found in two *Lok Sabha* (Lower House of Indian Parliament) motions introduced for discussion on 10 March 1959, which suggested enlarging India's nuclear research 'to the field of defence.' During the discussion, Prime Minister Nehru downplayed the Chinese nuclear threat and asserted that India was ahead of China in nuclear R&D.[7]

Notwithstanding Nehru's unconcerned public posture, the Indian Government was actually aware of the Chinese decision's implications for India's national security. Its concern was mirrored in a statement made by the Indian permanent representative to the United Nations

be 'developed into a great boon, for the benefit of all mankind.' See, US Department of State, *Documents on Disarmament, 1945–1959* (Washington, D.C.: Department of State Publication, 1960), p. 399.

[5] For a discussion on this, see David Hart, *Nuclear Power in India: A Comparative Analysis* (London: Allen and Unwin, 1983).

[6] For a historical background of the Chinese nuclear programme, see John Wilson Lewis and Xue Litai, *China Builds the Bomb* (Stanford, Calif.: Stanford University Press, 1988), especially pp. 35–72.

[7] G.G. Mirchandani, *India's Nuclear Dilemma* (New Delhi: Popular Book Services, 1968), p. 13.

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in August 1959. The representative revealed that 'the Government of India has noted with concern that the number of countries possessing nuclear weapons may soon be increased and thus considerably add to the current dangerous possibilities.'[8] Nehru himself stated in the Indian Parliament on 22 November 1960 that 'If nothing effective is done in regard to disarmament in the course of the next three or four years, it may perhaps become too late to deal with it; it may become almost impossible to control the situation.'[9] Nehru's reference was certainly China and he proved right when China tested a nuclear weapon in 1964. However, New Delhi chose to pursue nuclear disarmament to address the problem.

In October 1962, China and India fought a brief but intense border war.[10] The war left far-reaching consequences on India's strategic psyche. It not only exposed India's defence vulnerabilities, it also invalidated Nehru's assumptions that a communist land power would not engage India militarily and security could be achieved through the posture of peaceful coexistence. Two changes occurred in India's defence planning in the aftermath of the war: (1) the nature of threat to India was appreciated more 'realistically' with the growing perception that China posed a long-term danger; and (2) deterrence and defence became important in India's defence planning and an integral element in India's diplomacy.[11]

The 1962 Sino-Indian border war, however, did not cause an abrupt change in India's nuclear policy. India's defence preparation in the aftermath of the war relative to China remained at the conventional level and the Indian military planned for, at most, another limited conflict in order to deny 50,000 sq. miles of disputed territory claimed by Beijing and defending India's geo-strategic interests in Nepal, Sikkim and Bhutan.[12] Two factors influenced India to advance such a defence posture. Firstly, it employed international diplomacy as the primary means to restrain China from acquiring a nuclear weapons

[8] *Ibid.*

[9] Jawaharlal Nehru, *India's Foreign Policy: Selected Speeches, September 1946 – April 1961* (New Delhi: The Publications Division, Ministry of Information and Broadcasting, Government of India, 1961), p. 235.

[10] On the Sino-Indian Border War, see John W. Garver, *Protracted Contest: Sino-Indian Rivalry in the Twentieth Century* (Seattle: University of Washington Press, 2001); Neville Maxwell, *India's China War* (Bombay: Jaico Publishing House, 1970).

[11] Ashok Kapur, 'Peace and Power in India's Nuclear Policy,' *Asian Survey*, Vol. X, No. 9 (September 1970), pp. 784–5

[12] Lorne J. Kavic, *India's Quest for Security: Defense Policies, 1947–1965* (Los Angeles: University of California Press, 1967), p. 214.

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capability. And secondly, India did not want to engage in a nuclear arms race with China due to its fear that it would ruin the Indian economy.

Yet, the war brought the Chinese nuclear threat to the limelight and stimulated debate over India's own nuclear identity. In reaction to the border clash, the right-wing Hindu nationalist *Bharatiya Jana Sangh* demanded the production of nuclear weapons by India as part of India's long-term defence efforts against China.[13] Subsequently *Jana Sangh* raised the same demand in the *Lok Sabha* arguing that 'only those who wish to see Russians or Chinese ruling India will oppose the development of nuclear weapons.'[14] Despite such demands from opposition political parties, the Indian Government still remained firm not to embark on a military nuclear programme.

From 1947–1964, India primarily focussed on developing a wide-ranging civilian nuclear infrastructure with an apparent intent of using atomic energy for industrial and economic purposes. And there was no overt indication of any military implications of India's nuclear programme during this period except that New Delhi did not act in such a way that would permanently foreclose its military nuclear option. However, Indian elites were well aware that their country's nuclear energy programme contained 'a built-in advantage of defence use if the need should arise.'[15]

Phase II: 1964–1974
Politics of 'Nuclear Option'

This was a period of soul-searching of India's nuclear policy precipitated by the first Chinese nuclear test on 16 October 1964. Against the backdrop of the still sore wound of 1962 defeat, the Chinese test set off an unprecedented nuclear debate in India. This debate primarily focussed on what measures India could take to

[13] G.G. Mirchandani, 'India and Nuclear Weapons,' in *Perspectives of India's Nuclear Policy*, ed. T.T. Poulose (New Delhi: Young Asia Publications, 1978), pp. 55–6.

[14] *Lok Sabha Debates*, Vol. 15, 3rd Series (23 March 1963), col. 5780–5783.

[15] This quote is adapted from a note of India's first Prime Minister Jawaharlal Nehru (1947–1964), who wrote it in the margin of a memo from Homi Bhabha, the first Chairman of the Indian Atomic Energy Commission. Bhabha submitted the memo to the Prime Minister detailing a nuclear agreement reached with Canada in 1964. See Ashok Kapur, *India's Nuclear Option: Atomic Diplomacy and Decision-Making* (New York: Praeger Publishers, 1976), p. 194.

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counter a perceived Chinese nuclear threat and what were the merits and demerits of India developing its own nuclear arsenal. After a decade of contemplation, India conducted a so-called 'peaceful nuclear explosion' (PNE) in May 1974.

Chinese Nuclear Test: Reactions in India

On 29 September 1964, American Secretary of State, Dean Rusk, revealed that the United States expected China would conduct a nuclear test in the near future.[16] This revelation sparked a nascent nuclear debate in India. Inder Malhotra, for example, opined that the Indian Government could not and should not pursue the Nehruvian nuclear policy in the aftermath of the Chinese nuclear test. He argued the 'first fruits of the Chinese nuclear explosion will be psychological and political rather than military.' Prophetically he predicted: 'The pressure for rethinking on this policy is . . . bound to grow; it is likely to emanate from the Opposition and from within the Congress Party.'[17]

Confirming Dean Rusk's anticipation, China conducted its first nuclear test on 16 October 1964. Indian Prime Minister Lal Bahadur Shastri immediately reacted by observing that the Chinese blast had 'come to me and I think to the whole world as a shock and a danger to the maintenance of peace.'[18] However, he was reluctant to review India's peaceful nuclear policy. On a radio broadcast three days later, Shastri indicated that India's nuclear policy would remain unchanged and India would not emulate the Chinese example of developing and testing nuclear bombs.[19]

Notwithstanding Shastri's 'no policy change' stance, various political parties (including a majority of the All India Congress Committee members), the Indian media, many influential public opinion-makers and a majority of the Indian polity reacted sharply demanding the manufacturing of nuclear weapons by India. *Jana Sangh* at a working committee meeting on 4 December 1964 resolved that the party

[16] 'Statement by Secretary of State Rusk on Chinese Communist Nuclear Program,' 29 September 1964, printed in US Arms Control and Disarmament Agency (hereafter A.C.D.A.), *Documents on Disarmament*, 1964 (Washington, D.C.: US Government Printing Office, 1965), p. 440.

[17] Inder Malhotra, 'India's Response to Chinese Nuclear Threat,' *The Statesman*, 9 October 1964.

[18] *The Hindustan Times*, 17 October 1964.

[19] *The Hindustan Times*, 20 December 1964.

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'. . . considers it imperative that an all out effort be made to build up an independent nuclear deterrent . . . and urges the government of India to revise its stands accordingly.'[20] The *Praja Socialist Party* (PSP) in a similar fashion demanded immediate manufacturing of Indian bombs. PSP leader Nath Pai passionately argued in party's mouthpiece, *Janata*: 'The explosion of China in defiance of the treaty at Moscow (Partial Test Ban Treaty), in defiance of world opinion, was not a freak, nor just the blowing of a cracker by an erratic child, it was the culmination of a certain process which she has laid down for herself. We have to think of, judge and evaluate it against the background of the Chinese overall strategy, long-term policy, long-term activities in the whole of Asia and in the world.'[21] A majority within the Congress Party also favoured India's building of a nuclear arsenal in the aftermath of the Chinese nuclear test. At the All India Congress Committee (AICC) meeting on 7 and 8 November 1964, the majority of the speakers came out 'strongly and frankly' in favour of India manufacturing atom bombs.[22]

The Indian media, with few exceptions, also favoured India's manufacturing of nuclear weapons. An editorial in *Pioneer* on 19 October 1964 was typical in this context. It stressed that the Chinese test posed a 'new menace' to India, a threat which India could counter either by relying on a U.S. nuclear guarantee (which the editor argued would prove unreliable and politically unacceptable) or by reversing India's anti-nuclear weapons posture.[23] The Indian press also debated the political implications of Chinese nuclear capability for India. *The Indian Express*, in an editorial, commented that China's 'membership into the nuclear club of five world powers gives her a status of which the bomb is a symbol. . . . The question arises in purely psychological terms—can India afford to sit still while the Chinese continue to score an advantage over us.'[24]

The majority of the Indian public supported India's acquisition of nuclear weapons in the aftermath of the Chinese test. Gerard Braunthal in a survey conducted amongst the general public in early 1966 found that 7 out of 10 believed India should produce its own

[20] Shyam Bhatia, *India's Nuclear Bomb* (Sahibabad: Vikas, 1979), p. 112.
[21] Nath Pai, 'A Dispassionate Assessment of the Chinese Atom Bomb,' *Janata* (New Delhi), 13 December 1964, p. 3.
[22] 'AICC and the Bomb,' *The Economic Weekly*, 14 November 1964.
[23] *The Pioneer* (Lucknow), 19 October 1964.
[24] *The Indian Express* (Madras), 19 October 1964.

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atomic weapons.[25] He further said: 'Those who answered positively argued that atomic weapons were needed for defense against China and Pakistan to withstand any blackmail and to maintain a balance of power, that national prestige would be enhanced, and that India no longer would need to rely militarily on American and Russian nuclear umbrella.'[26]

The Bomb Debate

The Chinese test triggered an unprecedented and sustained nuclear debate in India.[27] Four basic issues were debated by the Indians. They were: (1) the morality of India possessing nuclear weapons; (2) whether the Chinese nuclear test constituted an essentially political or military threat to India; (3) the financial cost of an Indian nuclear weapons programme and a Sino-Indian nuclear arms race; and (4) whether Indian security was really assured by implied Soviet and American extended deterrence guarantees against Chinese aggression.

Moral issues were important elements of the Indian debate about acquiring nuclear weapons. Many thought building nuclear weapons was contrary to Gandhi's teachings as well as inconsistent with Nehru's international diplomacy of nuclear disarmament. Nuclear opponents also argued that the ethical dimension of India's foreign policy should not be sacrificed which had, they felt, earned the country respect in the eyes of the world community. Abstaining from nuclear weapons would

[25] Gerard Braunthal, 'An Attitude Survey in India,' *Public Opinion Quarterly,* Vol. 33, No. 1 (Spring 1969), p. 81.

[26] *Ibid.*

[27] For an overview of the debate, see Sisir Gupta, 'The Indian Dilemma,' in *A World of Nuclear Powers?*, ed. Alastair Buchan (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1966), pp. 55–67. Few influential opinion-makers include, Raj Krishna, 'India and the Bomb,' *India Quarterly,* Vol. XXI, No. 2 (April–June 1965), pp. 119–37, who advocated a nuclear deterrent against China, while pursuing arms control and disarmament goals; R. K. Nehru, 'The Challenge of the Chinese Bomb,' *India Quarterly,* Vol. XXI, No. 1 (January–March 1965), pp. 3–14; and M. J. Desai, 'India and Nuclear Weapons,' *Disarmament and Arms Control,* Vol. 3, No. 2 (Autumn 1965), pp. 135–42, strongly opposed India going nuclear. Masani propagated a security arrangement with the West as an alternative option. See, M.R. Masani, 'The Challenge of the Chinese Bomb,' *India Quarterly,* Vol. XXI, No. 1 (January–March 1965), pp. 15–28. For views of influential public opinion-makers, also see 'India and the Chinese Bomb: A Symposium,' *Gandhi Marg* (New Delhi), Vol. 9, No. 1 (January 1965), pp. 4–12; and 'India and the Bomb: A Symposium,' *Gandhi Marg,* Vol. 10, No. 1 (January 1966), pp. 11–18.

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help India to pursue the cause of nuclear disarmament. On the other hand, India's nuclear weapons advocates argued that it was unrealistic to depend on only moral force for security when there were five nuclear weapons states in the world. Security, they concluded, should take precedence over morality. This group further argued that since India wanted nuclear weapons to deter its adversaries, acquisition of nuclear weapons could be reconciled with Gandhi's teachings.[28]

A second central element of the debate was whether China's nuclear explosion represented a direct military threat to India. Opponents of nuclear weapons argued that China's explosion was primarily to gain status and prestige and was directed more towards the United States and the Soviet Union than India. Militarily, India's acquisition of nuclear weapons would be largely irrelevant to the world's central strategic balance. India should not overreact to China's explosion; rather it should try other means, such as nuclear disarmament, to meet the challenge. Moreover, the existing Chinese military threat to India was basically conventional, which India was countering through defence review and reorganisation. Proponents of nuclear weapons, on the other hand, argued that one should not take risks with regard to national security affairs. Given the history of Sino-Indian relations and especially the 1962 war, China posed a concrete, long-term threat to India's security. Deterrence against China, this school of thought asserted, should be the cornerstone of India's security policy. In addition, China could use nuclear weapons to coerce India during a future dispute and to extend influence in South Asia at India's expense. Therefore, the seriousness of the Chinese nuclear threat was, from this perspective, based less on the prospect that China would actually use nuclear weapons against India, but that they could be applied to intimidate India as part of a 'blackmail' or 'compellence' strategy.[29] An Indian Institute of Defence Studies and Analyses (IDSA) study concluded that only an Indian nuclear arsenal could elevate India to a position of equality with China where the former would be assured

[28] Sampooran Singh, *India and the Nuclear Bomb* (New Delhi: S. Chand, 1971), p. 105.

[29] Shelton I. Williams, *The US, India, and the Bomb*, Studies in International Affairs 12 (Baltimore, Maryland: Washington Centre for Foreign Policy Research, School of Advanced International Studies, Johns Hopkins University, 1969), pp. 30–2. Thomas Schelling originally coined the term 'compellence.' He defined it as the forcing of an opponent's 'withdrawal, or his acquiescence, or his collaboration' by threatening to use military capability. See Thomas Schelling, *Arms and Influence* (New Haven: Yale University Press, 1966), p. 69.

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that it would not be subject to nuclear blackmail and coercion of the latter.[30]

Indians also discussed the financial cost of a nuclear arsenal. Opponents pointed out that it would hamper economic and social development programmes of the country, which should be the highest concern for the government. Opponents also claimed that building and maintaining a nuclear force would be an extra burden on the Indian economy since it was not a substitute for conventional defence. But proponents argued that national security should take precedence over other fiscal matters. Hence, the Indian Government should not hesitate to build a nuclear arsenal for the defence of the country. Furthermore, proponents opined that a modest nuclear weapons programme could be accommodated within the government's current level of expenditures. They cited Homi Bhabha's estimate of an affordable figure to build an Indian nuclear arsenal.[31]

A final component of the Indian nuclear debate concerned whether implied security guarantees from nuclear powers were enough to ensure India's security relative to China. The no-bomb group said that superpowers' extended deterrence guarantees were good enough for India's security. Those who favoured a nuclear force countered that one should not rely on any outsider's guarantee for its own national security. Self-help should be employed to ensure one's own security. Over time, it was found that there had been a serious credibility problem with regard to external security guarantees.

Dynamics for a Policy Shift: Birth of a Nuclear Trajectory

Despite the Shastri Government's initial stance not to change policy, pressure on the Prime Minister gradually mounted to review India's nuclear policy from multiple directions. Significantly, this pressure

[30] Institute for Defence Studies and Analyses, *A Strategy for India for a Credible Posture Against a Nuclear Adversary* (New Delhi: IDSA, 1968), p. 4; Also see S. Gopal, 'The Choice,' *Survival*, Vol. X, No. 2 (February 1968), especially p. 60.

[31] On 24 October 1964, Bhabha in an All India Radio broadcast on the United Nations Day claimed that nuclear weapons could be made remarkably cheaply. According to him: 'a stockpile of some 50 atomic bombs would cost under Rs.10 crores [$21 million] and a stockpile of 50 two-megaton hydrogen bombs something in the order of Rs. 15 crores [$31.5 million].' See, Homi J. Bhabha, 'All India Radio address,' 24 October 1964, in *Nuclear India Vol. II*, ed. J.P. Jain (New Delhi: Radiant Publishers, 1974), pp. 159–60.

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came not only from the opposition political parties, but also from his own Congress Party as well as from within the government.

New Delhi Pradesh Congress President, Mushtaq Ahmed, was the first amongst those in the Congress Party to declare publicly that 'the only course for India is to produce her own atom bomb to defend herself.'[32] A robust pressure on the Prime Minister from his own party came during the All India Congress Committee (AICC) meeting on 7 and 8 November 1964. At the AICC meeting, one hundred delegates submitted a petition to the party leadership urging that India acquired 'an independent nuclear deterrent to protect herself against any possible threat from China.'[33] Even the General Secretary of the party, Bibhuti Mishra, during the AICC discussion on international affairs, demanded that the Congress policy ought to support the indigenous manufacturing of nuclear weapons.[34]

Despite substantial pressure from many delegates, Shastri remained firm on his 'no policy change' stance. During the meeting, he observed that India could not 'go nuclear' for compelling economic, moral and political reasons. He argued that the country had already been suffering badly from the conventional arms build-up and the building of a nuclear arsenal would force the government to abandon economic development plans. Moreover, he viewed 'the possession of nuclear weapons would be directly opposed to the policy of peace and non-violence' of Gandhi and Nehru. The Prime Minister also feared a bomb decision would have a spiral effect because India 'could not be content with one or two bombs. The spirit of competition was bound to capture her.' Shastri resisted all pressures and the unanimous final declaration confirmed the continuation of the existing nuclear policy line of the government.[35]

In the last week of November 1964, *Lok Sabha* held its first debate on foreign affairs after the Chinese nuclear test. Three alternative motions on nuclear policy were introduced for debate: one called for immediate production of an atomic bomb; a second one called for embarking on 'nuclear-based defence installations in the country'; and a third concerned reorienting foreign policy in light of the Chinese bomb. During the discussion, two options in general were voiced to deal with the Chinese bomb: either India should seek

[32] 'India Urged to Produce Atom Bomb,' *The Times of India*, 26 October 1964.
[33] K. Rangaswami, 'Leaders Reject Demand for Atom Bomb,' *The Hindu*, 9 November 1964.
[34] *The Hindu Weekly*, 8 November 1964.
[35] Rangaswami, 'Leaders Reject Demand for Atom Bomb.'

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a nuclear security guarantee from the West or it should build its own nuclear bomb to counter the Chinese threat. Significantly, these options were also supported by many governing party members. For example, Bhagwat Jha Azad supporting the latter option argued that the Chinese intimidation required India to be prepared to 'go all out to use nuclear power for the defence of the country.'[36] Another Congress Party member, Harish Chnadra Mathur, argued that India should do whatever was necessary to defend the country against the Chinese nuclear threat. He observed: 'There is no other morality; one moral duty is the security of this country, the honour of this country and the safety of this country. Everything else will have to be subjugated to that.'[37]

Despite considerable pressure, Shastri was reluctant to change government's policy line. On 23 November, the Prime Minister reiterated his earlier stand that the Indian Government would stick to its traditional policy of developing and applying nuclear energy only for 'peaceful purposes' and indicated his government would pursue nuclear disarmament to tackle the problem.[38] However, the next day (24 December) he gave in to the combined pressure of the Parliament members and slightly modified his government's policy, switching over from a 'no bomb ever' stance to a 'no bomb at present' position. Shastri indicated that India had 'the capacity to produce the atom bomb,' however, maintained that a decision should be taken in this regard only 'after taking into full consideration all the aspects of the question and what the Members (of Parliament) have said about the change in policy.' He further stated:

> I do not say that the present policy is rigid and can never change. An individual may have a policy and a conviction for which he can live and die, but we cannot take this attitude in the political field. Here situation changes constantly and we have to adapt our policy to these changes. If some amendment is needed to what we have said today, we shall make it.[39]

It was a significant deviation from Shastri's initial rigid no-bomb stance. Its importance lay in the implication that the present nuclear policy was Shastri's own, based more on intuition and political instinct than on expert advice and analysis. On 27 November, *Jana Sangh*

[36] *Lok Sabha Debates*, 10th Session, 3rd Series (23 November 1964), col. 1280.
[37] *Ibid.*, col. 1309.
[38] *Ibid.*, col. 1134.
[39] Shastri delivered his speech in Hindi. An English version of the speech was printed in *Seminar* (New Delhi), No. 65 (January 1965), pp. 50–2.

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introduced a motion in the *Lok Sabha*, which called for manufacture of nuclear weapons. Shastri won a voice vote against the motion. But he secured it assuring the parliament members that his policy would not jeopardise national security. In his speech for the first time he mentioned that India's nuclear programme would entail 'peaceful nuclear *explosives*.'[40]

This change was subtle, but critical. By it, Shastri in fact adopted a 'nuclear option' strategy embracing a middle ground (the third option).[41] This strategy was considered to be the pragmatic posture[42] at that time given that there were obvious moral, economic and political reasons for not embarking on an explicit nuclear weapons programme. More importantly, this policy change paved the way to undertake the 'Subterranean Nuclear Explosion Project' (SNEP), which Shastri authorised in November 1965.[43] There was no immediate possibility of manufacturing nuclear weapons from the project. However, this initiative's importance lay in the fact that it had the implied option to go nuclear from a PNE foundation. Indeed, it was the beginning of a new era in India's nuclear programme, which eventually culminated with the 1974 nuclear explosion. This explosion provided India the capability and the option to produce nuclear weapons if it so desired.

India's Search for a Security Guarantee

Prime Minister Shastri explored the possibility of an external security guarantee from the major powers in the aftermath of the Chinese

[40] 'Nuclear Race Will Ruin Country's Economy—Shastri's Firm Stand: Many M.Ps. Plead for Change in Policy,' *The Hindu*, 28 November 1964 (emphasis author's).

[41] Following the Chinese test, three broad groups supporting three distinct nuclear policy options emerged within the Congress Party. A bare majority favoured the building of an independent Indian nuclear force to counter Chinese nuclear threat. A tiny minority, including the Prime Minister himself, rejected a posture of producing nuclear weapons. They emphasised nuclear disarmament as a means to counter the Chinese nuclear threat. A third group advocated a middle course neither to undertake nor exclude a nuclear weapons programme. Instead of embarking on an explicit nuclear weapons programme, it favoured a vigorous development of nuclear technology so that it would be possible to 'go nuclear' within a short period of time if required. This position subsequently came to be known as the policy of 'nuclear option.'

[42] Major General D. Som Dutt, *India and the Bomb*, Adelphi Paper 30 (London: International Institute of Strategic Studies, November 1966), p. 9.

[43] Raja Ramanna, *Years of Pilgrimage* (New Delhi: Viking, 1991), p. 74; Bhatia, *India's Nuclear Bomb*, p. 106.

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nuclear test.[44] However, he was half-hearted and indecisive over the nature of seeking an external security guarantee for fear of domestic opposition and suspicion of any such commitment's credibility.

Indians in general had serious doubt about the utility of an external security guarantee.[45] In particular, Indians suspected the credibility of such a guarantee in a crisis scenario. This was reflected in a conversation between B.K. Nehru, India's ambassador to the US and the Director of the US Arms Control and Disarmament Agency, William Foster, just two weeks after the Chinese nuclear test. During this conversation, Nehru said that: 'the United States would not come to our aid by attacking China if at the same time the Soviet Union said it would assist China under such an attack.'[46] Moreover, many viewed that an external security guarantee was nothing short of sacrificing the country's sovereignty and non-aligned policy and inviting Western powers to dominate India.

Shastri first raised the issue of a security guarantee to his British counterpart while visiting London in early December of 1964. Interestingly, his point was not a 'specific' security guarantee for India, but to devise a general kind of security arrangement under which the United States, the Soviet Union, Great Britain, and France would provide a nuclear guarantee to all non-nuclear states. At a press conference on 4 December, Shastri maintained that it was for the nuclear powers to discuss some kind of guarantee, which was needed not only by India but also by all the non-nuclear countries.[47]

Nuclear powers were, at best, vaguely committed to providing security guarantees to non-nuclear states. US President Lyndon Johnson observed on 18 October 1964, two days after the first Chinese nuclear test, that the nations that 'do not seek nuclear weapons can be sure that if they need our strong support against some threat of nuclear blackmail, then they will have it.'[48] To the Indians,

[44] For a general discussion on India's search for a security guarantee, see A. G. Noorani, 'India's Quest for a Nuclear Guarantee,' *Asian Survey,* Vol. VII, No. 7 (July 1967), pp. 490–502.

[45] Typical of this position was a commentary by Maharaj K. Chopra, 'Nuclear Guarantee is meaningless today,' *The Indian Express*, 3 May 1967.

[46] This meeting took place on 3 November 1964. Cited in Glenn T. Seaborg with Benjamin S. Loeb, *Stemming the Tide: Arms Control in the Johnson Years* (Lexington, Mass.: Lexington Books, 1987), p. 118.

[47] 'Shastri asks Big-3 consider guarantee against n-attack,' *The Hindustan Times*, 5 December 1964.

[48] 'Radio-Television Address by President Johnson,' 18 October 1964, printed in A.C.D.A., *Documents on Disarmament, 1964,* pp. 465–9.

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this verbal commitment by itself was not enough to protect their country from the Chinese nuclear threat. Indian diplomats sought clarification of Johnson's offer and pressed for a more explicit nuclear guarantee. However, Washington was not ready to go beyond this verbal commitment. The *Hindustan Times* reported that 'US officials do not see why they should go beyond the pledge made by President Johnson on 18 October 1964, to support any country that felt threatened by Chinese nuclear test.'[49]

For whatever reasons—the reluctance of the major powers to give such a guarantee and/or doubts about the credibility of a security guarantee—India's search for a binding nuclear deterrence commitment from others ultimately proved futile. Therefore, India had to pursue a different course as predicated by the looming nuclear security dilemma emanated from China's possession of nuclear weapons. The alternative course that India adopted unfolded incrementally, gradually leading it towards the Pokhran I 'peaceful' nuclear explosion.

Indo-Pakistani War, 1965 and India's Nuclear Perception

Within eighteen years of their independence, India and Pakistan fought their second war in 1965 over the disputed territory of Kashmir.[50] In the midst of the intense nuclear debate, this war impacted substantially on India's nuclear perception.

For New Delhi, the most disturbing aspect of this conflict was Beijing's diplomatic support to Islamabad and its threat to open a second front along India's Himalayan borders. On 8 September 1965, China sent an open diplomatic note to India threatening 'grave consequences' if India proceeded with military action against Pakistan.[51] The Chinese also increased aggressive troop movements along border areas raising the spectre of PRC's military intervention. Although China did not make good on its crude ultimatum, it persuaded many Indians, including bureaucrats and politicians, to conclude that an independent Indian nuclear capability was the only means to prevent future Chinese nuclear blackmail and intimidation.

[49] *The Hindustan Times*, 27 December 1964.

[50] On the origins of this war, see Sumit Ganguly, *The Origins of War in South Asia: The Indo-Pakistani Conflicts since 1947* (Boulder, Colo.: Westview, 1994).

[51] William J. Barnds, *India, Pakistan, and the Great Powers* (London: Pall Mall, 1970), p. 206.

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For example, on 22 September 1965, a day before the cease-fire agreement took effect, one hundred members of the Indian Parliament petitioned to Prime Minister Shastri demanding an immediate decision to develop nuclear weapons. The petition referred to the bitter experience of weapons denial by Western governments during the war and emphasised that the security of the country must no longer depend on the 'mercy or whim of so-called friendly countries.'[52]

Although many of the petitioners were traditional bomb advocates, many others joined in this initiative because they considered the strategic equation of the region had changed. The Chinese ultimatum was perceived as a sign of increased bullying from Beijing and growing collusion between China and Pakistan. They also viewed the cessation of aid by Washington during the conflict as an ominous sign of India's growing strategic isolation. Furthermore, they noted that the reticent attitudes of the USA and the USSR had dashed any hope of assistance from them in a future conflict with China. Hence, the petitioners concluded that 'India's survival both as a nation and as a democracy, in the face of the collusion between China and Pakistan, casts a clear and imperative duty on the Government to take an immediate decision to develope our nuclear weapons.'[53]

Indira Gandhi and the 'Nuclear Option': Early Years

Indira Gandhi succeeded Prime Minister Shastri, who died in the Soviet (currently Kazakhstan) city of Tashkent immediately after formalising the cease-fire agreement that formally brought the 1965 Indo-Pakistani War to an end. Showing her abhorrence of nuclear weapons, the new Prime Minister immediately shelved her predecessor's subterranean nuclear explosive project (SNEP) after assuming power. Being Nehru's daughter and deeply influenced by Mahatma Gandhi, it was not a surprising initiative from Indira Gandhi. But the important point to ponder here is that her initial stance was soon modified in view of strategic developments that had enormous implications for India's national security.

The first serious strategic development that brought a change in Indira Gandhi's nuclear stance was the Chinese test of a thermonuclear weapon on 9 May 1966. In reaction to this development,

[52] Mirchandani, *India's Nuclear Dilemma*, pp. 38–9.
[53] *Ibid*., p. 39.

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the Prime Minister announced in the *Lok Sabha* that in addition to 'peaceful' uses of atomic power, India would increase nuclear technological know-how and 'other competence.'[54] She did not elaborate what she meant by the latter term. It was interpreted, however, as a subtle, but crucial, change in her nuclear policy. It also indicated that she would pursue Shastri's policy of developing nuclear 'explosive' technology. As the *Statesman* reported: 'Most MPs (Member of Parliament) irrespective of party distinction, said this evening (May 10) that they detected . . . a subtle change in emphasis from her past pronouncements. This change, according to numerous MPs . . . is, in fact, a continuation of the late Shastri's statement that India's self-abnegation in relations to nuclear weapons could not be considered a commitment for all times.'[55] The following day, several executive members of the Congress Party Parliamentary Group demanded that India had no alternative but to develop the nuclear bomb in self-defence or at least to embark on a vigorous pursuit of a nuclear technological development 'to an extent where a switch-over to arms production was possible in a short time.' In reply, Gandhi assured them that 'the Government would step up its efforts to develop scientific and technological know-how in the field of nuclear energy.' The Prime Minister also asserted that there was no question of a country like India depending upon others to defend itself.[56]

China again stirred India's strategic nerve by testing a missile mounted with a nuclear warhead in October 1966. This enhanced China's capability to hit targets deep into India. Given this development and China's determination to build a modern nuclear force, the Indira Gandhi Government began to consider seriously exercising the nuclear option by embarking on a nuclear weapons programme. As a US State Department study in 1966 concluded: 'It is probable that, *without* a dramatic alternative, in a few years India will decide to become a nuclear power.'[57] However, Gandhi still chose not to begin a *definite* nuclear weapons programme considering its economic, political and diplomatic fallout. She instead geared up research and development of India's nuclear explosive technology. She also resisted growing non-proliferation pressure from the major powers as was

[54] 'A Subtle Change in Emphasis,' *The Statesman*, 11 May 1966.
[55] *Ibid.*
[56] 'Congress MPs demand N-bomb,' *The Indian Express*, 12 May 1966.
[57] State Department study S/P-66-34-UNNC4: 11, cited in George Perkovich, *India's Nuclear Bomb* (Berkeley: University of California Press, 1999), p. 117. Emphasis original.

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reflected in India's decision not to sign the Nuclear Non-Proliferation Treaty (NPT) in 1968.

The NPT and India

Prior to the conclusion of the NPT in 1968, India had been an ardent proponent of such a treaty. Its support for a non-proliferation treaty was primarily motivated to prevent China from building a nuclear arsenal. When such a prospect appeared dim in the emerging NPT, India chose to stay out of the treaty.

New Delhi had four primary concerns in the formulation of the NPT. They were: (1) ending further production of nuclear weapons and delivery systems; (2) securing commitments to pursue nuclear disarmament; (3) obtaining security guarantees; and (4) retaining the right to conduct peaceful nuclear explosions. The first three concerns reflected its security problem emanating primarily from China's possession of nuclear weapons, while the fourth manifested a central aspect of its nuclear posture. India was offered little by the nuclear powers on these four issues of primary concern. The objectives of India and the nuclear powers remained far apart in the NPT. While India wanted a reversal of the current process of nuclear proliferation, the major powers' primary aim was to stop further horizontal proliferation of nuclear weapons. This gap in objectives finally hardened India's stance against the NPT.

India repeatedly voiced its concerns about China's nuclear weapons during the NPT negotiations and indicated that if its 'China problem' was not addressed, it would stay out of the treaty. The Chinese nuclear testing during the NPT negotiations with its implied intention to build a sophisticated nuclear arsenal aggravated India's concerns. As External Affairs Minister, M.C. Chagla, declared in *Lok Sabha* in 1967 that India was 'under the continuing menace of a country which had already exploded an atomic bomb, and we will certainly bear in mind this vital factor' while considering India's policy towards the NPT.[58] India's rejection of the NPT in 1968 was a fallout of this concern. The NPT not only failed to alleviate India's strategic apprehensions, it accentuated its insecurity by making China a 'legal' nuclear state. The decision of the Indian Government not to sign the treaty was

[58] *The Hindu*, 28 March 1967.

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supported by a majority of the Indian population. A survey in 1972 found that 68.9 per cent showed extremely strong and unqualified antipathy towards the NPT.[59]

Furthermore, India's NPT negotiating postures also reflected one of the central features of its nuclear policy of the time. As noted earlier, following the Chinese nuclear test, India embarked on a programme of developing nuclear explosive technology. It was intriguing during the NPT negotiations that India repeatedly insisted on retaining the right to conduct 'peaceful' nuclear explosions. India's representative at the UN explicitly opposed a US-led effort to prohibit non-nuclear weapons states from conducting peaceful nuclear explosions. He argued that it was nothing but to deny 'the benefits of science and technology to the developing nations of the world.'[60] The Indian insistence on retaining the right to conduct a peaceful nuclear explosion was hence compatible with its contemporary nuclear policy.

Strategic Dynamics in 1970 and the Sarabhai Profile

Ever since China tested its first nuclear device in 1964, India's nuclear perception, debate and policy had primarily been reactive to China's nuclear behaviour. On 24 April 1970, when China launched its first long-range rocket carrying a satellite into orbit, Indians perceived that this signified a Chinese determination to build a ballistic missile capability that could hit at distant Indian targets. Surveying the public mood after the Chinese launching of the satellite, the Indian Institute of Public Opinion concluded: 'Reactions in certain circles bordered on the panicky. The Chinese space feat, it appeared, tended to warp our perspective; we felt humbled for having lost a race we never chose to enter. Patriotic voices were raised to undo the damage done to the nation's security, to its morale and—this was not said in so many words—to our national pride.'[61] It projected a growing high threat perception about China's nuclear and missile capabilities amongst the Indian public.

[59] Ashis Nandy, 'The Bomb, the NPT and the Indian elites,' *Economic and Political Weekly*, Vol. 7, No. 31–33 (August 1972), p. 1539.

[60] 'Statement by Indian representative (Trivedi) in the First Committee of the United Nations General Assembly,' 31 October 1966, in Jain, *Nuclear India*, Vol. II, p. 187.

[61] Indian Institute of Public Opinion, *Monthly Public Opinion Survey*, Vol. 17, No. 3 (December 1971), p. 49.

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Following China's satellite launch, the Indian Parliamentary and Scientific Committee convened a special seminar on the implications of Chinese growing missile delivery capability for India's national security. The seminar concluded that India had no other alternative but to go nuclear, which was 'scientifically feasible, politically highly desirable, strategically inescapable, and economically not only sustainable but actually advantageous.'[62] In a similar fashion, India's two prestigious research institutes—the Indian Council for World Affairs and the Institute for Defence Studies and Analyses—also organised seminars to discuss country's nuclear policy in view of China's growing nuclear and missile capabilities. The participants at these seminars also strongly urged the Indian Government to embark on producing nuclear weapons immediately.[63]

Against such a backdrop, IAEC Chairman, Vikram Sarabhai, announced two important decisions that had far-reaching implications for India's nuclear policy. The first was that India would not produce nuclear weapons, but it would retain the option of conducting underground nuclear explosions for peaceful purposes.[64] This implied that the Indian Government had revived the 'subterranean nuclear explosive project,' which was shelved by Indira Gandhi immediately after taking over power.

The second initiative concerned the adoption of a ten-year nuclear and space programme by the Indian Government.[65] Known as the 'Sarabhai Profile,' the plan was the most ambitious in the history of India's nuclear and space development programme. It envisaged a self-reliant nuclear technological base and an advanced space programme, which clearly foreshadowed the development of India's missile delivery system. The profile justified such an ambitious plan noting that India in next ten or twenty years 'would need a very strong base of science and technology, of industry and agriculture, not only for our economic well being but for our national integration and *for ensuring our security in the world*.'[66] The Profile made it clear that India had adopted a cautious long-term nuclear policy in view of China's nuclear and

[62] 'MPs and defence experts feel India must go nuclear,' *The Times of India*, 10 May 1970.

[63] Singh, *India and the Nuclear Bomb*, p. 102.

[64] N. Seshagiri, *The Bomb! Fallout of India's Nuclear Explosion* (Delhi: Vikas, 1975), p. ix.

[65] Atomic Energy Commission, Government of India, *Atomic Energy and Space Research: A Profile for the Decade 1970–80* (Bombay: Atomic Energy Commission, Government of India, July 1970).

[66] *Ibid.*, p. V. Emphasis added.

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ballistic missile capabilities. Commenting on the space programme, the *Hindu* in an editorial concluded that 'by the end of the decade, India would have attained some independent proficiency in rocket and missile development and this would have its value both for civil and military purposes.'[67] The Sarabhai Profile, therefore, manifested an Indian determination to strengthen the nuclear option by embarking on a vigorous programme of technology development.

1971 Bangladesh Independence War and the Nuclear Issue

India and Pakistan fought a third war in 1971 within twenty-four years of their independence.[68] Initially beginning as a civil war in the eastern wing of Pakistan, it ended with India's military intervention resulting in the break-up of the country and the emergence of independent Bangladesh. This war left significant strategic and nuclear implications for India.

On 10 December 1971, at an intensified stage of Indo-Pakistani fighting, the US sent the nuclear-capable aircraft carrier—the *USS Enterprise* and nine supporting warships to the Bay of Bengal. The true motive of the Americans behind deploying this vessel was never made public. However, Henry Kissinger has noted in his memoirs that the carrier group was deployed 'ostensibly for the evacuation of Americans, but in reality to give emphasis to our warnings against an (Indian) attack on West Pakistan.'[69] Indeed, it generated substantial strategic pressure on India at a crucial stage of the war.

The presence of the *Enterprise* in the Bay of Bengal during the war was strategically alarming to the Indians. They conceived it as part of an American coercive diplomacy to create pressure on New Delhi in favour of Pakistan. It created a feeling that even superpowers could pose a nuclear threat to India.[70] How far the incident actually affected India's subsequent defence planning is unknown, but it did certainly

[67] 'Ambitious Nuclear Programme,' *The Hindu*, 28 July 1970.

[68] On the 1971 War, see Robert Jackson, *South Asian Crisis: India, Pakistan, and Bangladesh* (London: Chatto and Windus, 1975); Tariq Ali, *Can Pakistan Survive? The Death of a State* (London: Penguin Books, 1982); Richard Sisson and Leo E. Rose, *War and Secession: Pakistan, India and the Creation of Bangladesh* (Berkeley: University of California Press, 1990).

[69] Henry Kissinger, *The White House Years* (Boston: Little, Brown, 1979), p. 905.

[70] In interviews conducted by the author with several strategic experts in New Delhi, including K. Subrahmanyam, it was pointed out that the US did pose a nuclear threat to India. This perception basically resulted from the *Enterprise* incident of 1971. The Indians were particularly sensitive to the fact that the ship was nuclear. After

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influence India's threat perception. The Vice Chief of Naval Staff, Vice Admiral M.R. Schunker, recalled at a seminar in the early 1980s that 'the memory of "Exercise Enterprise, 1971" should alert us to the danger that superpower nuclear threats are not necessarily confined to mutual deterrent postures: that in certain scenarios, that threat can be directed against us also.'[71]

In addition to the *Enterprise* incident, the Indians perceived the US 'tilt' policy toward Pakistan during the war as most ominous.[72] It implied a possible strategic partnership between the US and Pakistan. Even more frightening to India was the prospect that a US–Pakistan–China strategic triangle would develop in the near future. After all, the Indians reasoned, President Nixon used Islamabad as an intermediary to open up China during the Indo-Pakistani War and Pakistan would certainly be eager to build a tripartite strategic partnership. Such a potential brought India closer to the Soviet Union and the two countries signed a Treaty of Peace, Friendship and Cooperation on 9 August 1971. This war indeed prompted India to pursue a more robust defence and nuclear policy.

Pokhran I

India conducted a PNE at the Pokhran test site on 18 May 1974, codenamed—'Buddha Smile.' It was the culmination of a ten-year contemplation and policy debate that originally began in reaction to China's nuclear test in 1964. The exact date is unknown when Indira Gandhi actually gave authorisation to go ahead with the preparation for the test. However, a series of events and decisions over several years before the test finally led India down the road to Pokhran I.

Against the backdrop of China's nuclear efforts, Prime Minister Gandhi informed the Parliament on 31 August 1970 that her government was studying the economic and technical issues surrounding

this episode, the Indians also began to view the US base in Diego Garcia as a nuclear threat to India as well as the great powers' presence in the Indian Ocean region as a potential source of nuclear blackmail, intervention, gunboat diplomacy and proxy wars. See R.N. Misra, *Indian Ocean and India's Security* (New Delhi: Mittal Publications, 1986), p. 252.

[71] 'Address by Vice Admiral M.R. Schunker,' in *Nuclear Shadow over the Sub-Continent*, ed. Colonel Pyara Lal (New Delhi: United Service Institution of India, 1981), p. 2.

[72] On this, see Christopher Van Hollen, 'The Tilt Policy Revisited: Nixon–Kissinger Geopolitics and South Asia,' *Asian Survey*, Vol. XX, No. 4 (April 1980), pp. 339–61.

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peaceful nuclear explosives.[73] This was the first serious indication from her that the Indian Government was considering conducting a nuclear explosion. The momentum for a nuclear explosion gradually picked up. IAEC Chairman, Vikram Sarabhai, told at the Fourth International Conference on the Peaceful Uses of Atomic Energy in September 1971 in Geneva that Indian scientists were developing nuclear explosive engineering techniques on a top priority basis.[74]

In May 1972, during a debate on the Ministry of Defence's annual budget, all of India's political parties, save two Communist parties, demanded that India should develop nuclear weapons or at least embark on a programme that would ensure production of nuclear weapons within a very short time. In reply, Defence Minister, Jagjivan Ram, informed the Parliamentarians that the 'Atomic Energy Commission is studying the technology for conducting underground explosions for peaceful purposes.'[75] Again in November 1972, *Lok Sabha* members inquired about the progress of the 'feasibility study and other preparations for the experimental nuclear explosions.' Prime Minister Gandhi assured the Parliament members that the Atomic Energy Commission was constantly reviewing the progress in the technology of underground nuclear explosions both from the theoretical and experimental angles and also taking into account their potential economic benefits and possible environmental hazards.[76]

Eventually, the explosion took place on 18 May 1974. It was not very clear when Indira Gandhi took the 'final decision' to conduct the blast in absence of definite government source materials in this regard. Different persons who were involved in the project have given different dates of the explosion decision. For example, Defence Minister Jagjivan Ram said after the test that the decision to explode a nuclear device was taken 'three years ago,' which meant sometime in 1971.[77] IAEC Chairman, Homi Sethna, asserted that he 'gave the green signal to Dr. Ramanna and his colleagues to go ahead with this project' in May 1972.[78] Raja Ramanna, the chief architect of the device, during a press conference immediately following the test announced that the nuclear explosion was conceived exactly two

[73] Bhabhani Sen Gupta, *Nuclear Weapons? Policy Options for India* (New Delhi: Sage, 1983), p. 5.
[74] Cited in Perkovich, *India's Nuclear Bomb*, p. 159.
[75] *Link* (New Delhi), 7 May 1972, p. 9.
[76] *Lok Sabha Debates*, Vol. 20, No. 3 (15 November 1972), col. 49.
[77] 'N-test decision taken in 1971, says J. Ram,' *The Indian Express*, 20 May 1974.
[78] 'Trombay Plutonium Used for Blast,' *The Hindu*, 20 May 1974.

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years before when the *Purnima* research reactor was commissioned on 18 May 1972.[79] These conflicting claims indicate that the decision to conduct a nuclear explosion was taken incrementally connected by various events and decisions spanning over four years. What is clear is that in 1970, the Indian Government began to consider seriously the conduct of a nuclear explosion in view of China's nuclear activities. Sentiment for moving ahead gained momentum in the wake of the 1971 Indo-Pakistani War. In early 1972, Indira Gandhi instructed the Atomic Establishment to undertake necessary scientific and technological preparations for a nuclear explosion pending a final decision. The Indian Atomic Establishment formed an explosion supervising committee after receiving these instructions from the Prime Minister. The committee informed the Prime Minister in February 1974 that preparations for the explosion were complete. Gandhi gave final permission for the test almost immediately after this report.[80]

Following the explosion, New Delhi was quick to indicate that the blast had no military implications. However, on several accounts, this Indian claim, if not grossly misleading, was confusing. There was hardly any doubt in the fact that it was not a definite Indian step towards building nuclear weapons. However, it was clearly a significant step towards strengthening its nuclear option, which eventually paved the way for India's building of a nuclear arsenal.

India considered all nuclear explosions as evil before it developed a visible 'nuclear option' policy in the second half of the 1960s. India's representative to the Eighteen Nations Disarmament Committee, V.C. Trivedi, maintained in August 1965 that 'all nuclear tests are basically evil; they encourage evil; and the sooner the evil is dealt with the better.'[81] This formulation was based on the scientific fact that technologically there was hardly any fundamental difference between peaceful and military nuclear explosions. In other words, the Indian Government was aware that a PNE could be used for military purposes. Therefore, India's claim that the 1974 explosion was 'only peacefully motivated' was contrived. Indeed, the blast manifested a consistency and continuity in India's nuclear policy. As noted earlier, India since the mid-1960s had been developing a nuclear option surrounding

[79] Cited in Ravi Kaul, *India's Nuclear Spin-Off* (Allahabad: Chanakya Publishing House, 1974), p. 19.

[80] According to Ashok Kapur, the final decision for the explosion was taken 'on and around' 15 February 1974. See Kapur, *India's Nuclear Option*, p. 198.

[81] A.C.D.A., *Documents on Disarmament, 1965*, p. 330.

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atomic explosive technology. It was an outgrowth of this policy and a 'demonstrative blast' of India's growing nuclear assertiveness.

Doubts about its peaceful character also arose from the fact that the Indians never gave an adequate explanation about the results and accomplishments of the test. There had been no reporting of coherent scientific or industrial use of the results of the experiment. Nor was there any evidence that India seriously used the results of this PNE for its socio-economic or industrial development in subsequent years.[82]

International reactions also demonstrated that there had been serious doubts about India's claim of the explosion's 'peaceful' character. Pakistan was quick to indicate that the explosion validated its long-held suspicion that India's nuclear programme was motivated to build nuclear weapons and it was planning a nuclear explosion ever since China conducted its first nuclear test in 1964.[83] Americans also expressed concern, considering the adverse impact it might have on the regional stability and on nuclear non-proliferation efforts in general. The US Government in reaction ordered a review of aid to India and an inter-agency review was conducted. It recommended that international action should be taken to stop India from pursuing a nuclear aberration and Washington should canvass support for it.[84]

Canada reacted quite angrily with a sense of 'betrayal.' It was alleged that the plutonium that Indians used in the explosion was extracted from the CIRUS reactor, which was supplied by Canada. Just four days after the explosion, Canada stopped shipment of all nuclear equipments and materials to India and suspended all types of Indo-Canadian nuclear cooperation. The Canadian Secretary of State for External Affairs asserted that Canada could not 'be expected to assist and subsidize, directly or indirectly, a nuclear programme which, in a key respect, undermines the position which Canada has for a long time been firmly convinced is best for world peace and security.'[85]

However, the majority of the Indian people supported the idea of developing nuclear strength for defence purposes in the aftermath

[82] On this point, see Peter R. Lavoy, *Learning to Live with the Bomb? India and Nuclear Weapons, 1947–1974,* unpublished PhD Dissertation, University of California, Berkeley, 1997, pp. 398–403.

[83] Bhumitra Chakma, 'Road to Chagai: Pakistan's Nuclear Programme, Its Sources and Motivations,' *Modern Asian Studies*, Vol. 36, No. 4 (October 2002), pp. 879–81.

[84] 'US Orders Review of Aid to India,' *The Times of India*, 29 May 1974.

[85] Swedish International Peace Research Institute (SIPRI), 'nuclear-weapon proliferation,' *SIPRI Yearbook 1975: World Armament and Disarmament* (London: MIT Press, 1975), p. 21.

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of the 1974 explosion. A nation-wide survey found that 59% of the respondents supported such an idea.[86] Weighing up all political and diplomatic costs, India, therefore, decided to live with keeping the nuclear option open. The 1974 explosion was not really considered by New Delhi to be a nuclear weapon test. However, this was an exercise of weapons *option* based on a proven technology. Its implication had been that it strengthened the viability of the weapons option through having the independent capability to initiate a military nuclear programme. It can also be considered as a technological and political signal of intent and capability.

Two questions in particular—why India conducted a nuclear explosion in 1974 and why it conducted the explosion at the time it did—have since generated substantial controversy, which are also important in the context of the general debate on nuclear proliferation. Dhirendra Sharma, for example, has concluded that it was the 'backroom boys' spirit of the scientists that pushed Gandhi to eventually authorise the explosion.[87] In this contention, the technological momentum and the bureaucratic politics arguments have been employed to explain the 1974 Indian nuclear explosion. In a major study on India's nuclear programme, George Perkovich has also concluded that the 'Pokhran blast stemmed primarily from domestic dynamics' meaning that scientists' push and Gandhi's motivation to score domestic political gains were mainly responsible for the Indian test.[88]

But a careful scrutiny of the events and factors that led India toward the first Pokhran test reveals that more fundamental strategic imperatives were rooted in the Indian decision. As can be observed from the preceding discussion, Indians had been debating and contemplating a viable nuclear policy over many years in the context of long-term Chinese nuclear threat. The 1974 nuclear explosion was a culmination of India's search for a nuclear strategy against a growing nuclear security dilemma precipitated by the Chinese nuclear weapons programme.

[86] K.P. Misra and J.S. Gandhi, 'India's Nuclear Explosion: A Study in Perspectives,' *International Studies* (New Delhi), Vol. 14, No. 3 (July-September 1975), p. 351.

[87] Sharma, *India's Nuclear Estate*, p. 5.

[88] Perkovich, *India's Nuclear Bomb*, p. 187. In a simitar fashion, Frank Bray and Michael Moodie have concluded that the 1974 peaceful nuclear explosion was carried out to 'influence domestic, rather than world, opinion.' See Frank T.J. Bray and Michael L. Moodie, 'Nuclear Politics in India,' *Survival*, Vol. XIX, No. 3 (May–June 1977), pp, 111–16.

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India's decision to carry out a nuclear explosion was thus a politico-strategic one. Even assuming that nuclear scientists and bureaucrats created pressure on Gandhi to conduct the explosion, the decision was ultimately politico-strategic. It is noteworthy that Indira Gandhi shelved the SNEP immediately after assuming power in 1966. She took this decision primarily based on moralistic ground. However, she revived the project afterwards under the pressure of regional strategic developments and intensifying regional nuclear security dilemma. This incident highlighted the strategic nature of the Indian nuclear explosion decision. As can be observed, scientists and bureaucrats could not stop Gandhi from initially stalling the project. This factor also nullifies the technological momentum argument. If the technological argument were valid, the SNEP first of all would not have stalled. The revival of the SNEP was not an act of the scientists either. As noted earlier, the decision evolved gradually over the years based on careful assessment of threat perception emanated from Chinese nuclear activities and the intensifying regional nuclear security dilemma.

Neither was Indira Gandhi's PNE decision motivated to score domestic political gains. When the decision to go ahead with the preparation for the nuclear explosion was taken by Gandhi, she was at a peak of popular support following India's win in the 1971 Indo-Pakistani War. George Perkovich has noted, 'it may be conjectured that support in principle for developing a nuclear explosive device was solidified by late 1971, that concentrated work on building the vital components began in spring 1972, and that formal Prime Ministerial approval to make final preparations for a PNE occurred in September 1972.'[89] Therefore, Indira Gandhi's decision was not precipitated by her consideration to upgrade domestic political support. Furthermore, the domestic politics argument was not valid, because she did not use this method when she was in trouble politically in 1976 or 1977. If she were motivated to score domestic political points, her naturally preferred step would have been to conduct another nuclear explosion in 1976 or in early 1977 before the general election. Indira Gandhi herself once argued: 'How could it have been political? There were no elections coming up... It would have been useful for elections. But we did not have any.'[90] It can be concluded that the domestic

[89] Perkovich, *India's Nuclear Bomb*, p. 172.

[90] Cited in Rodney W. Jones, 'India,' in *Non-proliferation: The why and wherefore*, ed. Jozef Goldblat (London: Taylor and Francis, 1985), p. 114.

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politics and the technological momentum arguments were not primary components in India's decision to conduct a nuclear explosion in 1974.

Phase III: 1974–1998
Toward Pokhran II

For over two decades after the 1974 nuclear explosion, India pursued a policy of nuclear ambiguity—neither confirming nor denying its pursuit of a military nuclear programme. At times, the programme was slowed down, but the development and perfection of nuclear weapons and missile delivery-related technologies was never stopped. Various domestic factors (personal, moral, ideological, economic, and social) combined with an international environment still viewed by India as basically hostile to justifying the development of a nuclear power affected India's nuclear programme. Eventually the Indian strategic programme culminated with the Pokhran II, highlighting the fact that an intensifying South Asian nuclear security dilemma prevailed over all other considerations in governing India's nuclear policy choices.

Janata Interlude: Nuclear Sanity?

The brief Janata rule from 1977–1980, which was the first non-Congress administration in Indian history, provides important insights about the change and continuity in India's nuclear policy. The new Prime Minister, Morarji Desai, immediately after assuming power announced that he would reassess India's previous nuclear policy and promised that India would not conduct any further nuclear explosions including PNEs.[91] It meant three things. First, the new government would distance itself from Indira Gandhi's past nuclear policies. Second, it signalled that the new Prime Minister would adopt a more normative approach with regard to nuclear issues.[92] Finally, with such a posture, Desai hoped that his policy would help to win back nuclear energy assistance from the United States and Canada.

[91] *The Statesman*, 25 March 1977.

[92] Desai even vowed: 'Even if the whole world is going to have it (nuclear weapons), I am not going to be a party (in this process).' *The Patriot*, 7 May 1977.

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However, Desai's initial hardline anti-nuclear stance was subsequently moderated. This changed stance was first reflected in his speech in *Lok Sabha* on 26 July 1978. He stated that he only barred 'explosions,' but all along was in favour of 'blasts.'[93] He explained that explosions were needed only for 'political purposes' and actually did not enhance any further knowledge. According to Desai, underground engineering projects, like digging of canals and dams, exploration of oil, extraction of low-grade metal ores, required blasts, not explosions. But the simple fact was that technologically there was no basic difference between explosion and blast. This, in fact, reflected a subtle, but crucial, deviation from his original nuclear stance.

Two factors critically influenced Desai's subsequent deviation from his initial nuclear policy. First, Desai's initial anti-nuclear stance was proved untenable in the context of China's modernisation of its nuclear arsenal and Pakistan's growing nuclear potential, which even caused a rift within the government (in particular between the Prime Minister and the Defence Minister Jagjivan Ram).[94] During Desai's time in office, Pakistan was in a serious clandestine endeavour to acquire a nuclear weapons capability. Pressure was mounting on the Janata Government to respond to the looming Pakistani nuclear threat with a similar Indian programme. As if to vindicate this perception, Washington suspended aid to Pakistan on 6 April 1979 invoking the Symington Amendment[95] alleging that Islamabad was attempting to develop nuclear weapons. This incident caused substantial strategic concerns in India about Pakistan's 'Islamic Bomb.'[96] Hence, the Indian Government became bound to revive the nuclear explosive programme.[97]

Second, Desai's efforts of winning back American and Canadian nuclear cooperation remained largely unrealised during his tenure as Prime Minister. President Jimmy Carter's tough anti-proliferation policy and the adoption of the Nuclear Non-Proliferation Act (NNPA) by the US Congress in 1978 made a nuclear reconciliation between

[93] *The Statesman*, 27 July 1978.

[94] *Amrita Bazar Patrika* (Kolkata), 2 July 1979.

[95] In 1976, the US Congress adopted the Symington Amendment to the Foreign Assistance Act of 1961. This Amendment prohibited most US economic and military assistance to any country delivering or receiving nuclear enrichment equipment, material, or technology not safeguarded by the International Atomic Energy Agency.

[96] Swadesh Rana, 'The Islamic Bomb,' *India Today*, 1–15 June 1979, pp. 88–9.

[97] Inderjit Badhwar, 'Confused Preferences,' *India Today*, 16–30 September 1979, pp. 55–9.

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India and the US difficult. Despite considerable efforts, Desai also failed to reconcile the nuclear differences with Canada. His futile efforts were increasingly regarded as appeasement and a sell out of India's national interests.[98] Hence, Desai's initial nuclear policy gradually became vulnerable.

Before evolving Janata's nuclear policy any further, the government collapsed in July 1979 due to internal bickering. After the fall of Desai, interim Prime Minister, Charan Singh, was quick to indicate that he intended to keep nuclear options open.[99] Indeed, Charan Singh was the first to express concern officially from New Delhi about Pakistan's nuclear weapons programme. In his 1979 Independence Day (15 August) address, the Prime Minister maintained that if Pakistan had gone nuclear, India would 'review' its nuclear policy.[100] By 1979, Pakistan's nuclear potential, in fact, had become an important factor in New Delhi's nuclear policy planning. As Defence Minister C. Subramaniam observed at a major defence policy speech in October 1979, the concept of national defence must be much wider and argued if countries like Israel, South Africa, and Pakistan had acquired nuclear weapons capabilities, India 'would have to take some difficult decisions in regard to nuclear weapons.'[101]

Strategic Dynamics in the 1980s: Global and Regional Dimensions

The Soviet invasion of Afghanistan in December 1979 dramatically changed the South Asian strategic landscape deeply impacting upon India's nuclear perception. Ominously enough, it placed Pakistan in a more advantageous position than India in the ensuing US–Soviet Cold War equation. The US needed Pakistan as a strategic ally to resist the USSR's westward expansion and to channel aid to anti-Soviet forces in Afghanistan.

Signalling a change in the US policy approach towards Pakistan, the Carter Administration soon suspended the application of the Symington Amendment that had previously stopped assistance to

[98] For example, the Congress Working Committee (CWC) adopted a resolution expressing such a view in New Delhi on 7 August 1977. See *The Indian Express*, 8 August 1977.

[99] 'India to Keep Nuclear Options,' *The New York Times*, 28 July 1979.

[100] *The Indian Express*, 16 August 1979.

[101] 'India Cannot Foreclose Nuclear Options—Subramaniam,' *The Hindu*, 30 October 1979.

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Pakistan. It offered Islamabad a $300 million economic aid package. Subsequently, the Reagan Administration provided $3.2 billion economic and military assistance to Pakistan as a reward for helping the US to fight against perceived Soviet expansion in Southwest Asia. This aid package included, ominously from India's viewpoint, a sale of forty F-16 advanced fighting aircraft. Indians viewed that Pakistan's acquisition of F-16 would fundamentally change the conventional balance of power between India and Pakistan.[102] Worse yet, Washington began to show a lax attitude towards Pakistan's nuclear weapons programme. Furthermore, New Delhi feared that a Washington–Islamabad–Beijing axis would materialise in the context of Soviet Union's Afghan occupation, which would dramatically change India's strategic environment. In addition, the Indian Government became worried over the prospect that this development in Afghanistan and a resultant Washington–Islamabad–Beijing axis would pave the way for further Chinese assistance to Pakistan's nuclear and missile development programmes.

Against the backdrop of unfolding Afghan drama, Indira Gandhi returned to power in January 1980. Upon reassuming the Prime Ministership, Gandhi quickly moved to reverse her predecessor's nuclear explosion policy. On 17 February 1980, she asserted that India did not believe in making nuclear weapons, but should be free to carry out experiments if it was deemed necessary.[103] Clarifying this policy stance, she announced in the *Rajya Sabha* (Upper House of the Indian Parliament) that 'there would be no hesitation in conducting these (nuclear explosions) in the national interests.' New Delhi, she added, 'should not be caught napping' if Pakistan had acquired the capability to produce nuclear weapons.[104]

Under the Afghan shadow, Pakistan had been making rapid progress towards acquiring a capability to produce nuclear weapons. In particular, its progress in the production of fissile materials in Kahuta Uranium Enrichment Plant was alarming from an Indian perspective. New Delhi began to suspect that Pakistan would soon detonate a nuclear device. As Indian Atomic Energy Commission Chairman, Homi

[102] To pacify the Indians, Washington argued that supply of conventional weapons would reduce Pakistan's temptation to acquire nuclear weapons; however, India was not convinced. See, Dennis Kux, *India and the United States: Estranged Democracies* (Washington, D.C.: National Defense University Press, 1992), p. 383.

[103] *The Statesman*, 14 March 1980.

[104] 'PM for Peaceful Nuclear Tests in National Interests,' *The Times of India*, 14 March 1980.

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Sethna, speculated in May 1981, Pakistan could explode a nuclear device in the near future (in 1981 or 1982).[105]

Given such a prospect, India was caught in a dilemma in formulating a clear nuclear strategy. This dilemma was reflected in two specific developments in 1982. In early 1982, Indira Gandhi reportedly authorised preparations for a second peaceful nuclear explosion.[106] This was not carried out ultimately for 'unexplained reasons.' Fear of negative international economic and political fallout could have been the main reason why Indira Gandhi finally abandoned the plan. However, the episode highlighted an indecisiveness in India's nuclear policy in the midst of an intensifying nuclear security dilemma in South Asia.

A second development was India's drawing up of a pre-emptive strike strategy against Pakistan's nuclear facilities to prevent it from acquiring a nuclear weapons capability. The *Washington Post* reported in late 1982, based on leaked US intelligence sources, that India's military commanders had prepared a contingency plan for launching air strikes on Pakistan's uranium enrichment plant at Kahuta and the small reprocessing facility at PINSTECH in Rawalpindi.[107] Such a pre-emptive strike was never carried out. Fear of a general war between India and Pakistan, and the latter's ability to conduct retaliatory air strikes on Indian nuclear facilities prevented New Delhi from undertaking such an action. However, this incident also highlighted India's rapidly growing concern over the prospect of a Pakistani nuclear bomb.

With the growing pace of Indo-Pakistani nuclear competition and in the context of an intensifying tripartite nuclear security dilemma involving India, Pakistan and China, New Delhi had to pay serious attention to the development of missile delivery systems. Indian policy planners felt that without proper delivery systems, India's nuclear option would not be credible.[108] In July 1983, India launched the 'Integrated Guided Missile Development Programme' (IGMDP) and placed it under the Defence Research and Development Organization

[105] 'Pak N-Blast Any Time after June: Sethna,' *The Hindustan Times*, 6 May 1981.

[106] Bharat Karnad, 'Another Pokhran test in offing?' *The Hindustan Times*, 23 April 1982.

[107] Milton R. Benjamin, 'India Said to Eye Raid on Pakistani A-Plant,' *The Washington Post*, 20 December 1982.

[108] For a perceptive analysis of India's missile development and capabilities, see Anupam Srivastava, 'India's Growing Missile Ambitions: Assessing the Technical and Strategic Dimensions,' *Asian Survey*, Vol. XL, No. 2 (March–April 2000), pp. 311–41.

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(DRDO) for its implementation. It clearly signalled that India was determined to develop a viable nuclear deterrent capability. K. Subrahmayam maintained that the IGMDP made it clear that 'India was aiming at developing its nuclear option further.'[109]

The IGMDP included an anti-tank missile—*Nag*, two surface-to-air missiles—*Akash* and *Trishul*, one medium range surface-to-surface missile—*Prithvi*, and an intermediate range ballistic missile—*Agni*. There was no indication from the Indian Government about nuclear implications of the IGMDP at the time of its launching. However, questions were raised and suspicions were expressed with regard to the inclusion of the *Agni* and *Prithvi* in the programme. *Agni's* inclusion in particular was significant indeed, because without nuclear warheads on this missile, its development would make little sense. Questions were also raised with regard to the inclusion of the *Prithvi* in the IGMDP. This missile system could be used as a conventional explosive delivery vehicle although it would be more lethal (as well as cost-effective) if nuclear warheads were tipped on it. A retired Indian army officer has observed that '*Prithvi's* potential as a decisive weapon of war is not when it carries conventional munitions load, but when (it is) tipped with a nuclear device.'[110]

The Indo-Pakistani nuclear dynamics acquired a new twist when Pakistan's top nuclear scientist, A. Q. Khan, claimed in an interview in early 1984 that Pakistan could produce weapons-grade enriched uranium.[111] Indian leaders and the general public took this revelation seriously. Worse yet, this development coincided with the press report that US President Ronald Reagan had written a letter to his Pakistani counterpart, Zia-ul Haq, seeking the latter's promise that Pakistan would not enrich uranium beyond five per cent. In the same news item, the *Newa-i-Waqt* also reported that in return America was ready to provide nuclear guarantee to Pakistan the kind of atomic umbrella it provided to NATO member countries.[112] These two developments set off alarm bells in India. The reaction of K.C. Khanna, a prominent Indian journalist, was typical in this regard. He observed that India should immediately respond by declaring

[109] K. Subrahmanyam, 'India's Nuclear Policy—1964–1998,' in *Nuclear India*, ed. Jasjit Singh (New Delhi: Knowledge World, 1998), p. 39.

[110] Lieutenant General (Retired) Harwant Singh, 'Prithvi's Accuracy,' *Vayu* No. 4 (1994), p. 30.

[111] The interview was taken on 10 February 1984. It was published in Urdu daily *Nawa-i-Waqt*. An English version is reprinted in *Defence Journal* (Karachi), Vol. X, No. 4 (1984), p. 41.

[112] Cited in Perkovich, *India's Nuclear Bomb*, pp. 257–8.

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explicitly its nuclear weapons capabilities.[113] Prime Minister Indira Gandhi subsequently announced in *Lok Sabha* in March 1984 that 'My government is aware of Pakistan's effort to acquire uranium enrichment capability to assemble a nuclear weapon. This does not, however, mean that Pakistan is ahead of India in atomic energy development. Indian scientists are keeping abreast of *all aspects* of research and development connected with enrichment technology.'[114] This statement typified India's policy of nuclear ambiguity and steady strengthening of its nuclear option during this time.

By the mid-1980s, Pakistan's international procurement efforts for building a military nuclear programme and its significant progress towards acquiring a nuclear weapons capability had become quite evident.[115] To confirm this, A.Q. Khan indicated in an interview on 14 March 1985 that Pakistan, if required, could carry out an atomic explosion.[116] On 11 July 1985, the American ABC television network reported that Pakistan had successfully tested the non-nuclear triggering package for a nuclear weapon.[117] This was a major breakthrough and a concrete step made by Pakistani scientists towards achieving a nuclear weapons capability by Pakistan.

Given the above context, it was not surprising that all political parties, except the communists, felt that India should build nuclear weapons to counter Pakistan's nuclear capability.[118] At the All India Congress Committee (AICC) meeting on 4 May 1985, Prime Minister Rajiv Gandhi assured that his government would be 'looking into various aspects of this question to see what action we should take.'[119] In fact, Rajiv did build a robust nuclear option during his time in office. He ensured that India kept itself abreast of latest technologies in order to maintain a credible (although ambiguous) nuclear deterrent. In 1984, India imported ninety-five kilograms of beryllium from West Germany intended to be used in a newly commissioned beryllium

[113] *The Times of India*, 28 March 1984.
[114] *The Statesman*, 23 March 1984. Emphasis added.
[115] Inderjit Badhwar, 'Explosive Links,' *India Today*, 16–31 March 1985, p. 74. In March 1985, a West German court convicted a German businessman for smuggling an entire chemical plant for producing uranium hex fluoride—the gasified material used in uranium enrichment—between 1977 and 1980. See Leonard Spector with Jacqueline R. Smith, *Nuclear Ambitions: The Spread of Nuclear Weapons 1989–1990* (Boulder: Westview Press, 1990), p. 91.
[116] *Hurmat*, 14 March 1985, translated and reprinted in *Dr. A.Q. Khan on Pakistan Bomb*, ed. Sreedhar (New Delhi: ABC Publishing House, 1987), p. 79.
[117] Spector, *Nuclear Ambitions*,note 25, p. 332.
[118] 'India Can Meet Pak. N-Threat: Minister,' *The Times of India*, 8 August 1985.
[119] *Ibid.*

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plant, which experts suggested could be used in India's nuclear and missile programmes.[120] This was clearly indicative of India's vigorous pursuit of a viable nuclear option. Indian scientists also reportedly began work, with Rajiv's approval, on thermonuclear weapons in late 1984 or early 1985.[121]

The *Brasstacks* military exercises conducted by the Indian Army in the Rajastan desert along the Indo-Pakistani border between December 1986 and March 1987 pushed the Indo-Pakistani nuclear competition to a new height.[122] During the course of the crisis, Pakistani scientist A.Q. Khan gave an interview to prominent Indian journalist Kuldip Nayar. In the interview, Khan confirmed that 'what the CIA has been saying about our possessing the bomb is correct and so is the speculation of some foreign newspapers. . . . They told us that Pakistan could never produce the bomb and they doubted my capabilities, but they now know we have done it . . . Nobody can undo Pakistan or take us for granted. We are there to stay and let it be clear that we shall use the bomb if our existence is threatened.'[123] The basic objective of Khan's interview was, in fact, to communicate a nuclear deterrence signal to New Delhi during the course of the crisis. By doing so Islamabad made it clear that Pakistan had nuclear weapons and would not hesitate to use them in case of an Indian military attack on it. As Pakistani daily the *Muslim's* editor, Mushahid Hussain, who was present during the interview, commented: 'The message given by Dr. A.Q. Khan . . . is directed against all those detractors of Pakistan's "Islamic Bomb." To the Indians, it is a "hands-off Pakistan" message at a time when New Delhi has been carrying out massive warlike exercises all along our eastern border.'[124]

The nuclear signal from Pakistan was absolved by India with bellicose hostility. Prime Minister Rajiv confidently announced: 'We intend meeting President Zia's threat. We will give an adequate response.'[125]

[120] Michael Knapik and Mark Hibbs, 'German Firm's Beryllium Export to India May Have Violated U.S. Law,' *Nucleonics Week*, No. 30, Special Report (30 January 1989).

[121] David Albright and Tom Zamora, 'India, Pakistan's nuclear weapons: all the pieces in place,' *Bulletin of the Atomic Scientists*, Vol. 45, No. 5 (June 1989), p. 25.

[122] For a detailed discussion on the *Brasstacks* crisis, see Kanti Bajpai, P.R. Chari, Pervaiz Iqbal Cheema, Stephen Philip Cohen and Sumit Ganguly, *Brasstacks and Beyond: Perception and Management of Crisis in South Asia* (New Delhi: Manohar, 1995).

[123] Kuldip Nayar, 'Pakistan Has the Bomb,' *The Tribune* (Chandigarh), 1 March 1987, reprinted in *Strategic Digest* (New Delhi), Vol. XVII, No. 5 (May 1987), pp. 7–8.

[124] 'Bomb Controversy,' *The Muslim* (Islamabad), 3 March 1987.

[125] Tom Diaz, 'Gandhi Warns U.S. Is "Soft" on "Islamic Bomb" Threat,' *Washington Times*, 27 March 1987.

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Defence Minister, K.C. Pant, also assured that the Indian army would not be at a disadvantage in case of a Pakistani nuclear attack. Pant asserted: 'the emerging nuclear threat to us from Pakistan is forcing us to review our options . . . I assure the House that our response will be adequate to our perception of the threat.'[126] Defence scientist Raja Ramanna also confirmed that India could retaliate 'in kind' if confronted a nuclear attack.[127]

The revelation of Khan about the state of Pakistan's nuclear programme made an immediate impact on the Indian public. An *India Today* survey in the aftermath of the *Brasstacks* crisis revealed that 69 percent of the survey respondents believed that Pakistan had nuclear weapons and 68 percent 'felt India should take a similar path.'[128] The crisis indeed underscored the worsening nuclear security dilemma in South Asia.

By the late 1980s, India had substantially closed the gap between a decision to produce nuclear weapons and their actual development to a bare minimum. Around 1988, Rajiv Gandhi authorised the nuclear scientists and engineers at the BARC and the DRDO laboratories to refine nuclear weapons designs by reducing the size and weight of fission devices while increasing their explosive yields. Also significantly, the Prime Minister approved several major steps for building an Indian nuclear deterrent capability, such as the preparation of ready-to-assemble devices, increasing the number of such devices, and dispersing such weapons components around the country. In a personal recollection, K. Subrahmanyam has noted that India had achieved a nuclear deterrent by 1990.[129] Between 1988 and 1990, Subrahmanyam claimed, India readied at least two dozen nuclear weapons for quick assembly and potential dispersal to airbases for delivery by aircraft for retaliatory attacks against Pakistan.[130]

End of the Cold War: Deteriorating Security Environment

The abrupt end of the Cold War and consequent global structural change heralded an uncertain strategic environment for India. It

[126] 'India Announces Review of Nuclear Policy,' *Reuters*. 27 March 1987.

[127] Chris Smith, *India's Ad Hoc Arsenal: Direction or Drift in Defence Policy?* (Oxford: Oxford University Press, 1994), p. 191.

[128] Dilip Bobb and Ramindar Singh, 'Pakistan's Nuclear Bombshell,' *India Today*, 31 March 1987, p. 73.

[129] Subrahmanyam, 'Indian Nuclear Policy—1964–1998,' p. 44.

[130] K. Subrahmanyam, 'Politics of Sakhti,' *The Times of India*, 26 May 1998.

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meant the loss of a traditional strategic ally and reliable arms supplier—the Soviet Union. New Delhi also lost Moscow's veto-wielding support on the question of Kashmir at the United Nations. Moreover, and critically from India's point of view, the Soviet Union could no longer be counted on to provide a counterweight to China. The security guarantee implied in the 1971 Indo-Soviet Friendship Treaty was rendered practically invalid in the new international order. Given the fact that India and the United States were never strategic partners, the structural change of the international system intensified India's security concerns. Moreover, China and Pakistan's strategic postures in the post-Cold War era aggravated New Delhi's strategic anxiety. In 1993 and again in 1995, China conducted a series of nuclear tests and deployed nuclear warheads in Tibet targeting India.[131] This development, along with China's assistance to Pakistan in developing nuclear weapons and ballistic missile systems,[132] contributed to intensify the existing South Asian security dilemma substantially from the Indian point of view. In such a circumstance, India had to develop an independent and self-reliant defence posture that involved nuclear weapons.

Kashmir Crisis, 1990

In a fluid and an uncertain strategic environment, the Kashmir dispute flared up in 1990, nearly leading India and Pakistan to a fourth major war with possible nuclear implications. The crisis developed in the wake of an intensifying anti-Indian insurgency movement in Indian-administered Kashmir.[133] India alleged that the insurgents were backed and aided by Pakistan. New Delhi, hence, planned to

[131] R. Chandran, 'New Chinese Missiles Target India: US Daily,' *The Times of India*, 11 July 1997. Also, see Colonel A. Sahgals and Colonel T. Singh, 'Nuclear Threat from China: An Appraisal,' *Trishul*, Vol. 6, No. 2 (January 1994), pp. 32, 36.

[132] On China's help to Pakistan's missile and nuclear programmes, see US Central Intelligence Agency, 'Unclassified Report to Congress on the Acquisition of Technology Related to Weapons of Mass Destruction and Advanced Conventional Munitions,' 7 September 2001, http://www.cia.gov/cia/publications/bian/bian_sep_2001.htm>; Centre for Nonproliferation Studies, 'Chinese Assistance to Pakistani Nuclear and Missile Facilities,' http://cins.miis.edu/research/india/china/prcpak.pdf; and Nayan Chanda *et al.*, "The Race Is On,' *Far Eastern Economic Review*, Vol. 161, No. 24 (11 June 1998), pp. 20–2.

[133] For a detailed background on the development of the Kashmir insurgency, see Sumit Ganguly, 'Explaining the Kashmir Insurgency: Political Mobilization and Institutional Decay,' *International Security*, Vol. 21, No. 2 (Fall 1996), pp. 76–107.

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strike deep into Pakistani territory to destroy training camps and sanctuaries of the insurgent groups. Islamabad, anticipating such an Indian move, put its army and air force on alert. Military tensions soon escalated to the brink of a war and reportedly both countries prepared themselves to confront a nuclear attack from the other. Both later denied that the crisis spiralled to the level of nuclear brinkmanship. However, in the wake of escalating crisis, American President George Bush sent his Deputy National Security Adviser, Robert Gates, to India and Pakistan in order to defuse the crisis. American journalist Seymour Hersh later described this sequence of events in graphic detail:

> Sometime in the early spring of 1990, intelligence that was described as a hundred per cent reliable—perhaps an N.S.A. intercept—reached Washington with the ominous news that General Beg had authorized the technicians at Kahuta to put together nuclear weapons. Such intelligence, of 'smoking gun' significance, was too precise to be ignored or shunted aside. The new intelligence also indicated that General Beg was prepared to use the bomb against India if necessary. Precisely what was obtained could not be learned, but one American summarized the information as being, in essence, a warning to India that if 'you move up here'—that is, begin a ground invasion into Pakistan—'we're going to take out Delhi.'[134]

A Pakistani nuclear expert supported Hersh's account. Professor Pervaiz Hoodbhoy asserted that during the course of the 1990 crisis 'Pakistan assembled the different components (of a bomb) it had and developed a crude nuclear device.'[135] It is evident that Pakistan projected a clear nuclear deterrence posture during the 1990 Kashmir crisis.

Against this Pakistani move, India also undertook measures to communicate a nuclear signal to its rival. In the wake of the crisis, Indian Prime Minister, V.P. Singh, appointed Raja Ramanna as Minister of State for Defence and P.K. Iyengar as the Chairman of the IAEC. These appointments were significant in terms of communicating a nuclear signal to Pakistan and meant that India was increasing its nuclear preparedness.[136]

The 1990 Kashmir crisis heralded a new era in South Asian nuclear competition. It indeed established a rudimentary regional nuclear

[134] Seymour M. Hersh, 'On the Nuclear Edge,' *The New Yorker*, 29 March 1993, p. 64.

[135] Pervaiz Hoodbhoy, 'Nuclear Deterrence—An Article of Faith,' *The News*, 17 March 1993. Hoodbhoy also discussed about the issue in an interview with the author in May 1999.

[136] 'Iyengar, Ramanna Appointments Open Bomb Speculation in India,' *Nucleonics Week*, Vol. 31, No. 8 (22 February 1990).

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deterrence system. As Devin Hagerty has concluded. 'A strong case can be made that India and Pakistan were deterred from war in 1990 by the existence of mutual nuclear weapon capabilities and the chance that, no matter what Indian and Pakistani decision-makers said or did, any military clash could escalate to the nuclear level.'[137] The crisis once again reaffirmed the utility of nuclear weapons from the perspective of both Pakistan and India.

India's strategic nerve was alarmingly frayed when Pakistan's Foreign Secretary, Shahriar Khan, claimed in an interview with the *Washington Post* that his country had built necessary components and know-how to assemble at least one nuclear device.[138] The Indian anxiety was further reinforced by two specific developments in 1993 and 1994. A leaked American intelligence report in 1993 concluded that China had supplied M-11 missiles or components of this delivery system to Pakistan.[139] It aggravated India's uncertainty about China's intentions in the subcontinent and its anxiety over Sino-Pakistani collusion. This anxiety was again exacerbated with the revelation of former Prime Minister Nawaz Sharif at a public meeting on 23 August 1994 that Pakistan possessed an atomic bomb.[140] As former Prime Minister, his disclosure appeared to be credible in that Pakistan had already assembled bomb components and readied them for deployment. This marked a new stage in the South Asian nuclear competition.

By the mid-1990s, India was standing at the cross-road of a declaratory and non-declaratory nuclear deterrent posture, while still pursuing a policy of nuclear ambiguity. It is not clear whether at this stage India had actually built a nuclear arsenal, but it had certainly reached a point from where it could assemble nuclear weapons within a short period of time. The Indian public security discourse at this stage was that India maintained an adequate nuclear preparation as a precaution to confront an uncertain strategic environment.[141]

[137] Devin T. Hagerty, 'Nuclear Deterrence in South Asia: The 1990 Indo-Pakistani Crisis,' *International Security*, Vol. 20, No. 3 (Winter 1995/96), pp. 107–8.

[138] Steve Coll, 'U.S. Nuclear Diplomacy in South Asia Faces Obstacles,' *The Washington Post*, 8 February 1992.

[139] Brahma Chellaney, *Nuclear Proliferation: The US-Indian Conflict* (London: Sangam Books, 1993), p. 253.

[140] *The Muslim*, 24 August 1994.

[141] Manoj Joshi, 'Doctrine for the Bomb,' *The Morning Sun* (Dhaka), 6 January 1994; Akhtar Majeed, 'India Must Opt for the Bomb,' *The Times of India*, 2 September 1994; Amar Zutshi, 'Nuclear Strategy: India's Policy of Deterrence,' *The Statesman*, 25 November 1994.

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The precise nature of India's deterrent posture was also debated. For example, K. Subrahmayam argued that India did not need to match China or Pakistan's nuclear force, rather it should concentrate on the construction of a 'minimum nuclear deterrent.'[142] Although that deterrent was yet to be defined precisely, it was indicative of a new nuclear era. Strategic imperatives at this stage dictated that India carried out nuclear tests in order to maintain a credible nuclear deterrence posture. But fear of international fallout from doing so constrained India from pursuing this policy course. Even so, the crossing of the nuclear rubicon was increasingly imminent. Regional and international strategic developments in the next few years would prove to be decisive in India's advancing of an overt nuclear posture.

1995 NPT Renewal and the 'Near Test' Incident

The NPT was extended for an indefinite period by more than 170 countries in the 1995 NPT Review and Extension Conference. India did not participate in the conference and severely criticised, like before, that the 'indefinite extension of the NPT perpetuates the discriminatory aspects and provides legitimacy to the nuclear arsenals of the nuclear weapons States.'[143] Following this development, India began to fear that now it would be isolated internationally and face extreme pressure from the major nuclear powers to sign the treaty, or at least to agree to international inspection of its own nuclear facilities. However, still India remained firm on its stance that its own security imperatives demanded to stay out of the treaty until the other nuclear powers (primarily China) gave up their nuclear weapons.

As the Comprehensive Test Ban Treaty (CTBT) moved toward conclusion in 1995, India found that any window of diplomatic opportunity to press its own strategic concerns was rapidly closing. Once the CTBT was concluded, it would be politically very costly to conduct nuclear tests. Therefore, the Narashima Rao Government planned for a nuclear test in December 1995, like France and China, who first conducted series of nuclear tests and then joined the

[142] K. Subrahmanyam, 'Nuclear Force Design and Minimum Deterrence Strategy for India,' in *Future Imperilled: India's Security in the 1990s and Beyond*, ed. Bharat Karnad (New Delhi: Viking, 1994), pp. 176–95.

[143] 'India on NPT,' official spokesman's statement, printed in *Foreign Affairs Record*, Vol. XLI, No. 6 (June 1995), p. 148.

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treaty.[144] But before this plan reached its logical conclusion, American intelligence sources detected Indian preparations and Washington put enormous pressure on New Delhi to abandon the test.[145] Eventually Americans prevailed over indecisive Indian Prime Minister Narashima Rao. Allegedly, *Bharatiya Janata Party* (BJP) also considered nuclear testing when it came to power for two weeks in March 1996.[146] These 'near test' incidents highlighted India's strategic dilemma—whether to retain nuclear ambiguity or to unveil it in a rapidly changing global and regional strategic environment.

1996 Comprehensive Test Ban Treaty (CTBT)

Although India had been an active proponent of a comprehensive nuclear test ban treaty since the mid-1950s, it yet finally refused to sign the treaty when it was readied for signature in 1996.[147] Several key factors determined India's opposition to the treaty. Indians perceived that the CTBT as it had evolved was an offspring of the NPT, primarily aimed at preventing countries like India from building nuclear weapons (because all other non-nuclear states were already barred from conducting nuclear explosions under the terms of the NPT).[148] India also complained that the nuclear powers failed to link the CTBT to a 'time bound framework' for complete elimination of nuclear weapons.[149] In addition, India was very critical of the

[144] Raj Chengappa, 'Testing Times,' *India Today*, 31 December 1995, pp. 49–50. The Indian Government denied its preparations for a nuclear test at the time. However, Congress Party sources later disclosed that the Rao Government planned to conduct a nuclear test on 7 December 1995. See, 'Govt. talks to Cong. on CTBT,' *The Hindu*, 18 December 1999. Also, for a detailed discussion on the issue, see Vipin Gupta and Frank Pabian, 'Investigating the Allegations of Indian Nuclear Test Preparations in the Rajasthan Desert,' *Science and Global Security*, No. 6 (1997), pp. 101–88.

[145] Tim Weiner, 'India Suspected of Preparing for A-Bomb Test,' *The New York Times*, 15 December 1995.

[146] T.V.R. Senoy, 'The BJP was ready for tests as far as May 1996,' *Rediff on the Net*, 14 May 1998, <http//www.rediff.com.>

[147] For a comprehensive survey of India's views, negotiating style and refusal to sign the treaty, see Savita Pande, *CTBT: India and the Test Ban Treaty* (New Delhi: Siddhi Books, 1996), pp. 169–219. Also, on India's negotiating stances, see C. Raja Mohan, 'India and the CTBT: Time to Quit,' *The Hindu*, 10 June 1996.

[148] Arundhati Ghose, 'Taming India: The CTBT as a Control Mechanism,' *The Times of India*, 26 February 1999. Ghose was the Indian representative to the ENDC during the CTBT negotiations.

[149] Bhumitra Chakma, 'India and the Comprehensive Nuclear Test Ban Treaty,' *BIISS Journal*, Vol. 23, No. 3 (July 2002), p. 242.

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CTBT allowing sub-critical tests and computer simulation methods to upgrade nuclear arsenals of the nuclear powers.[150]

Additionally, and very critical from India's standpoint, the treaty failed to address India's main strategic concerns—the nuclear arsenals of China and Pakistan. As the Indian permanent representative to the UN clearly asserted, if 'countries around us (China and Pakistan) continue their nuclear programmes either openly or in a clandestine manner . . . we cannot permit our option to be constrained or eroded in any manner . . . '[151] China added fuel to this strategic concern by conducting a series of nuclear tests before acceding to the CTBT, which meant that the Chinese had reached such a level of nuclear technology sophistication that they felt no need to further physical testing.[152]

Indeed, the conclusion of the CTBT and subsequently increased pressure from the major powers to adhere to the treaty acutely exacerbated India's strategic anxiety. As a result, India was caught in a high degree of nuclear dilemma and its ambiguous nuclear posture was gradually becoming difficult to sustain. It was in such a context India ultimately advanced an overt nuclear posture.

Pokhran II

The BJP returned to power winning the February–March 1998 general elections. During the campaign and in its election manifesto, this Hindu nationalist party promised that it would review the nuclear policy if it was voted to power.[153] Soon after assuming office, the Vajpayee Government appointed a strategic review committee. Based on the recommendations of that committee, it carried out five nuclear tests on 11 and 13 May 1998. According to the Indian Government, India tested three types of weapon designs on 11 May: a thermonuclear

[150] K. Subrahmanyam, 'The CTBT Puzzle,' *The Economic Times*, 8 June 1996.

[151] 'Statement of Prakash Shah, India's permanent representative to the United Nations at the 50th session of the UN General Assembly,' 9 September 1996, printed in Ministry of External Affairs, *Statements by India on Comprehensive Nuclear Test Ban Treaty (CTBT), 1993–1996* (New Delhi: External Publicity Division, Ministry of External Affairs, Government of India, 1996), p. 139.

[152] Sanjay Suri, 'Chinese Test Seen Behind Indian CTBT Stand,' *India Abroad*, 23 August 1996, p. 8.

[153] Chapter Eight, 'Our Nation's Security,' Election Manifesto of the BJP 1998, printed in *Agni: Studies in International Strategic Issues* Vol. 2, No. 2 (September–December 1997), pp. 60–6.

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device, a fission device, and a low-yield device. Two additional sub-kiloton tests were carried out on 13 May. In a S*uo Moto* statement to the Parliament on 27 May, Prime Minister Vajpayee claimed that the tests were successful. He also announced a unilateral test moratorium.[154]

The question has arisen as to why India tested nuclear weapons at the point that it did? Two explanations are generally advanced in this regard. Firstly, the tests were inextricably linked to the rise of the BJP to power.[155] And secondly, the BJP conducted the tests to upgrade domestic political support.[156] If not totally wrong, these arguments are not sufficiently convincing to account for the Pokhran II. True, the BJP Government conducted the tests; however, the first argument ignores the fact that the Congress Government attempted to test a nuclear weapon in December 1995. If the Americans had not detected Indian preparations and put extreme pressure on Narashima Rao to abandon the planned test, history would have been that it was the Congress Party, not the BJP, that had advanced India's overt nuclear posture. Therefore, the linkage between BJP's rise to power and the nuclear tests is weak.

Many within the BJP might have thought the tests in terms of upgrading their election fortunes. However, the top BJP leadership was well aware that there was little that the tests could add in terms of political support, because BJP's policy on the nuclear issue was well-known. As if to vindicate this point, the BJP lost elections in three states (Hariana, Rajasthan and Delhi) only few months after conducting the tests.

Indeed, the Pokhran II was prompted by strategic factors. To the extent India was pushed to the wall on the nuclear issue in the aftermath of the indefinite extension of the NPT and the conclusion of the CTBT, sooner or later it had to make a choice. Against the backdrop of extreme pressure from the major powers to sign the CTBT, India's policy of nuclear ambiguity had gradually become unsustainable in the later half of the 1990s. The choice was either to accept a non-nuclear status by signing the NPT and the CTBT or to adopt an open declaratory posture by conducting nuclear test.

[154] 'Suo Moto Statement by Prime Minister Atal Behari Vajpayee to the Lok Sabha,' 27 May 1998, printed in *World Focus* (New Delhi), Vol. 19, No. 6–7 (June–July 1998), pp. 46–7.

[155] John Cherian, 'The BJP and the Bomb,' *Frontline* (Madras), 24 April 1998, pp. 4–9.

[156] Praful Bidwai, 'Dangerous Descent: Flawed Logic of Nuclear Tests,' *The Times of India*, 15 May 1998.

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India chose the latter option. As an Indian newspaper in its editorial maintained: 'When history is written, the CTBT will be best remembered for its unintended effect: it pushed India against a diplomatic wall and forced it to seize the closing window of opportunity to go nuclear.'[157]

India's nuclear policy since the 1960s has been primarily guided by and responsive to the existence and gradual intensification of a nuclear security dilemma in the South Asian region. The Pokhran II was a culmination of this policy process, which occurred in a vulnerable strategic environment that emerged after the end of the Cold War. Given this context, it was not surprising that India opted for the declaratory nuclear deterrence posture when it came to the point of making a choice. Opposite to this would rather have been surprising and contrary to its long-standing nuclear policy.

Conclusion: Indian Nuclearisation Process and the Nuclear Proliferation Debate

Indeed, multiple factors influenced the Indian nuclear development. During the first phase (1947–1964), a combination of factors—the motive to use nuclear energy for industrial growth and economic prosperity, to achieve technological and scientific self-sufficiency, the aspiration to transform India into a 'great state' and Homi Bhabha's immense influence on the nuclear programme—influenced the building of the Indian nuclear infrastructure. In the second phase (1964–1974), these factors diluted to a considerable extent due to the rise of the 'Chinese nuclear threat.' India responded to this development by adopting a 'nuclear option' strategy, which eventually culminated with the first nuclear test in 1974 (Pokhran I). From 1974–1998, in the third phase of its nuclear development, India persistently upgraded its 'nuclear option' capabilities against a gradually intensifying tripartite nuclear security dilemma (involving China, India and Pakistan) in the South Asia region. India pursued a policy of nuclear ambiguity—neither confirming nor denying the pursuance of a nuclear weapons programme—during this period that eventually led it down the road to Pokhran II.

Observably, the prestige factor in the context of the aspiration to transform India into a 'great state' might have played a role in the

[157] *The Hindustan Times*, 16 October 1999.

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Indian nuclear decision-making. Also, the IAEA bureaucratic push factor might have significant influence in determining the course of the Indian nuclear programme. It should not be surprising if many would have thought the nuclear programme in terms of domestic political gains. However, a closer look at the key junctures of India's nuclear proliferation decision highlights that critical push to move towards the nuclear path specifically came from the strategic factors. A nuclear trajectory in India developed in the context of China's first nuclear test in 1964. Before that there is no evidence to suggest that India ever contemplated an active military nuclear programme. As China modernised its nuclear arsenal and Pakistan emerged as a nuclear factor in the 1970s, a tripartite nuclear security dilemma eventually led India towards the 1998 nuclear tests.

The prestige factor, as noted above, although did play a part, yet has not been the paramount element of the Indian nuclear decision making. A careful scrutiny of the nuclearisation process proves that deeper motives other than prestige and status were involved in India's pursuit of a military nuclear programme. It is indeed difficult to conceive that India has invested such huge resources in a nuclear programme merely to derive national prestige. India had to build its nuclear programme against the need to invest resources in social and economic sectors. The Indian nuclear debate that ensued following the Chinese nuclear test in 1964 also indicated that economic consideration was one of the arguments that were advanced against India going nuclear. In addition, New Delhi was aware that a military nuclear programme could cause a deterioration of Sino-Indian relations and might even lead to a ruinous nuclear arms race. It was a foregone conclusion, moreover, that any Indian military nuclear programme would automatically provoke a similar Pakistani venture.[158] From a cost-benefit analysis, it appears unconvincing to argue that India has built a nuclear arsenal for only gaining prestige.

The technological momentum argument is partially valid, although in the ultimate analysis it does not provide an adequate explanation for India going nuclear. At critical junctures, it was not the technological compulsion that influenced the Indian nuclear decisions. In this

[158] During a debate in the *Rajya Sabha* (Upper House of the Indian Parliament) on 8 March 1966, Indian Prime Minister Indira Gandhi asserted: 'If we make them (nuclear weapons), then Pakistan will necessarily acquire bomb, from some quarter or the other.' The original statement was in Hindi. An English version is produced in R.L.M. Patil, *India—Nuclear Weapons and International Politics* (Delhi: National Publishing House, 1969), p. 54.

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context, Indira Gandhi's decision to initially shelve and subsequently revive the subterranean nuclear explosive project (SNEP) clearly disproves the technological momentum argument. Further, if this argument were all the time valid, India would have conducted nuclear tests well before 1998 because in technical terms it was ready to conduct a nuclear weapon test much earlier. Therefore, it is obvious that the technological momentum was not a critical factor in India's nuclear weapons development programme.

The domestic politics argument, although important to understand the first phase of India's nuclear development, fails to explain why India turned its civilian nuclear programme to a military-oriented project. No doubt, Homi Bhabha was instrumental in laying out an ambitious nuclear programme in the formative stage of India's nuclear development. However, he was not an important factor in India's adoption of a 'nuclear option' in the aftermath of the first Chinese nuclear test in 1964.

Many argue that the Pokhran I and II decisions by Indira Gandhi and Atal Behari Vajpayee respectively were undertaken in order to score domestic political gains. But a closer assessment reveals that neither Gandhi nor Vajpayee was motivated by such a consideration. Pokhran I decision, it should be noted, was taken when Gandhi was at a peak of domestic popularity following the 1971 Indo-Pakistani War. In addition, if she did consider a nuclear test for domestic popularity purpose, the natural action she would have subsequently undertaken was a second nuclear explosion when her popular support plummeted in 1976 or before the 1977 general elections. But she did not do that. It is also intriguing to observe that no other subsequent Indian Prime Minister before 1998 undertook this approach to upgrade his/her popularity. The Pokhran II decision, as argued above, was taken in the context of the strategic pressure that India confronted in the aftermath of the conclusion of the CTBT. The domestic politics argument is indeed an insufficient explanation for India's decision to go nuclear.

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