

**India's Nuclear Limbo as
a Normative Challenge
to the Nuclear Non-
Proliferation Regime,
1974-1983**

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Abstract

India's conflictual relationship with the nuclear non-proliferation regime can be traced to 1968, when it refused to sign the Nuclear Non-Proliferation Treaty despite playing an active role in the negotiation process leading to the treaty. It further infuriated the keepers of the regime with its underground nuclear test in May 1974, which it called a peaceful nuclear explosion (PNE). India however did not follow-up with efforts at immediate weaponization. Instead it raised the question in international fora as to why PNEs should be the preserve of only the superpowers. India's nuclear limbo from 1974 till the late 1980s, when its missile programme strengthened, questioned the entire logic of the non-proliferation regime that operated on a Murphy's Law of 'nuclear fatalism' – if a country possessed the know-how to produce nuclear weapons, it would certainly produce them. This paper argues that from May 1974 until at least the beginning of its integrated guided missile development programme in 1983, India's nuclear inaction posed a normative challenge to the US-led nuclear non-proliferation regime.

INDIA'S NUCLEAR LIMBO AS A NORMATIVE CHALLENGE TO THE NUCLEAR NON-PROLIFERATION REGIME, 1974 - 1983

Introduction

The trajectory of India's nuclear history is long and complex. It began in 1948 with the adoption of the Atomic Energy Act and the subsequent creation of the Atomic Energy Commission. India, along with France, remains one of the few countries that began its nuclear programme for explicitly peaceful purposes, at a time when no country had produced commercially viable electricity from atomic energy.¹ Until then, the only uses of atomic energy that the world had witnessed were the bombs dropped on Hiroshima and Nagasaki. In other words, Nehru's decision to steer clear of the bomb was a maverick policy for his time, comparable perhaps to his policy of non-alignment to steer clear of Cold War blocs. With Eisenhower's 'Atoms for Peace' speech at the UN General Assembly on 8 December 1953, and the establishment of the International Atomic Energy Agency (IAEA) in 1957, the 'peaceful atom' diffused into international discourse.²

Benoît Pelopidas argues that US proliferation experts' skewed reading of history has led to an overemphasis on proliferation history as opposed to histories of nuclear reversal, disarming and rollback.³ The US-led nuclear non-proliferation regime seems to believe in a sort of Murphy's Law of 'nuclear fatalism': if a country can build nuclear weapons, then it most certainly will. The US-led nuclear non-

* I would like to thank Gareth Austin and Jaci Eisenberg of the Graduate Institute Geneva and Andrew Heath of the University of Sheffield for very useful comments on earlier versions of this paper.

¹ It was not until 1951 when the Experimental Breeder Reactor-I in Idaho produced world's first usable amount of electricity by lighting four electric bulbs. "Argonne National Laboratory: History," Argonne National Laboratory, <http://www.anl.gov/history> (last accessed 27 November 2012).

² As a matter of interest, the IAEA's emblem was initially that of a lithium atom until it was realized that lithium is a metal used in the hydrogen bomb. Therefore, in December 1958 the emblem was changed for a 'harmless' beryllium atom. Paul Szasz, *The law and practices of the International Atomic Energy Agency* (Vienna: IAEA, 1970), 1001-3.

³ Benoît Pelopidas, "The Oracles of Proliferation: How Experts Maintain a Biased Historical Reading that Limits Policy Innovation," *The Nonproliferation Review* 18 (Mar. 2011): 301-3.

proliferation regime that operates with this Manichean world view has a clear demarcation of the 'other' - those states that did not enter the exclusive five-member nuclear club by 1968, according to the temporal criterion of the Nuclear Non-Proliferation Treaty (NPT).⁴ In addition, the regime mobilized an expansive institutional apparatus revolving around control and surveillance, or 'safeguards' and 'verification' as the IAEA terminology would have it. The outcome of this was an environment of deep suspicion of the actions of the 'other' and castigation (by the United States and the IAEA) if the suspicions were even partly proven right.

Hand in hand with this nuclear fatalism, what also permeates the regime is what Hugh Gusterson calls 'nuclear Orientalism,'⁵ i.e. nuclear weapons seem more dangerous in the hands of states of the non-West since they are automatically identified with authoritarian governments and therefore capable of irresponsible behaviour. The restraint exercised by the superpowers and their rationality that constitutes the backbone of deterrence, would not be replicable by these countries leading to a nuclear war and eventually to a nuclear apocalypse that would end the world. Gusterson's thesis is a highly interesting and attractive one and is not without merit, since the 'irrational', 'irresponsible', 'maniacal' are the adjectives that policymakers use to criticize each time a non-nuclear weapon state⁶ crosses or is suspected of crossing the nuclear Rubicon. The main lacuna in his argument is perhaps also the lacuna in Edward Saïd's *Orientalism*, i.e., how does the Orient or the non-West exercise agency under these constraints, because it does. The Indian

⁴ French physicist Bertrand Goldschmidt who was the French Governor on the IAEA's Board of Governors from 1958 to 1980, and also headed the International Relations Division of the French *Commissariat à l'énergie atomique* wrote, "If the Indian explosion had taken place, like the Chinese one, before the entry into force of the NPT, it would certainly have created less commotion. For the first time, such an operation had proved counterproductive for a country – at least in the short term..." Bertrand Goldschmidt. *The Atomic Complex: A Worldwide Political History of Nuclear Energy* (La Grange Park, IL: American Nuclear Society, 1982), 404.

⁵ Hugh Gusterson, "Nuclear Weapons and the Other in the Western Imagination," *Cultural Anthropology* 14 (1999): 111-43.

⁶ The Nuclear Non-Proliferation Treaty created a temporal criterion that bestowed the status of "nuclear weapon state" (NWS) on those countries that have tested nuclear weapons before 1968. This included only five states, namely, the United States, Soviet Union, United Kingdom, France and People's Republic of China. Those that did not fit into this category were the "non-nuclear weapon states" (NNWS).

nuclear trajectory is a valid case in point.

As mentioned earlier, India embarked on a peaceful atomic energy programme before the cause of the 'peaceful atom' became prevalent. Soon after Eisenhower's proposal for 'Atoms for Peace' in 1953, when the First UN Conference on Peaceful Uses of Atomic Energy was held in Geneva in August 1955, the chairman of the Indian Atomic Energy Commission, Homi J. Bhabha was chosen to preside over the Conference. Throughout the 1950s India received technical assistance in atomic energy from the United Kingdom, France, United States and Canada. Canadian assistance to India began in 1954 under the Colombo Assistance Plan, which was originally conceived as an arrangement to provide aid to the developing countries of the British Commonwealth. That year, Canada supplied India with a vertical tank-type research reactor in Trombay near Mumbai, which became known as the CIRUS. It is believed that India used plutonium produced as a by-product from this reactor for the underground test codenamed the 'Smiling Buddha' in May 1974.

While India was highly criticized by the international community for what the former claimed to be a 'peaceful nuclear explosion' (PNE) and which the latter refused to believe, PNEs have constituted an important component in the discussions that took place at the IAEA throughout the 1960s and are also enshrined in Article V of the NPT signed in 1968. In 1974, both the superpowers had conducted what they termed as PNEs. The first completely underground test took place in the United States in 1957 and in 1961 in the Soviet Union.⁷ In other words, it may well be argued that despite the technological sanctions on India that followed after May 1974, PNEs as a category had both relevance and prevalence in the international discourse on atomic energy. Unlike other postcolonial countries from the developing world India had been proactive on the international platforms related to atomic

⁷ Robert S. Anderson, "The Peaceful Nuclear Explosion Debates," paper presented at NPIHP conference of the University of Vienna, 16-18 September 2012.

energy, including the negotiations in 1956 leading to the IAEA statute and those between 1965 and 1968 leading to the NPT.

The purpose of this paper is to portray the normative opposition exercised by India vis-à-vis the nuclear non-proliferation regime since May 1974 by failing to undertake immediate steps towards a weapons programme, and thereby disproving the conventional wisdom of the Murphy's Law of 'nuclear fatalism', which still continues to form an important pillar of the regime. The first part of the paper explores the immediate reactions that emanated from the United States soon after the test and India's rebuttal. The second part, divided into four sub-sections, investigates the matter further by studying the possible temptations for weaponization. The sub-sections read as 'nuclear prestige', 'the domestic tumult', 'unstable regional security environment' and 'strained relations with the United States'. The third part looks at India's involvement at the international fora during this period, namely the proposals calling for the 'new international economic order' and promoting disarmament. Finally, the paper concludes with observations on the implications of this Indian nuclear inaction until the development of its integrated guided missile development programme (IGMDP) in 1983, on the edifice of the nuclear non-proliferation regime. While the decision to begin a weapons programme is roughly placed at 1988-9, when the IGMDP was showing signs of good progress, this paper focuses till the beginning of this missiles programme.

I. Inside the Smiling Buddha

On 18 May 1974 at 10 a.m., Indian Foreign Secretary Kewal Singh called the American chargé d'affaires David T. Schneider to inform him that India had 'carried out conducted a peaceful nuclear explosion' two hours earlier. Singh explained that the PNE was necessary 'to keep India abreast of the technology...for such purposes as mining and earth moving' and that India remained 'absolutely committed against

the use of nuclear energy for military purposes'. He also added that the United States Embassy was being informed ahead of all other diplomatic representatives. Schneider's response was flat. The news would be received with 'considerable shock' in Washington, he replied, for the United States 'did not believe it possible to distinguish between explosions for peaceful and military purposes'.⁸ It was this argument and counterargument that was reiterated each time India and the United States discussed the successful test of the Indian implosion device on 18 May 1974 in the Rajasthan desert in Pokhran.

The alleged use of plutonium from the Canadian-supplied CIRUS research reactor implicated the United States as well since it supplied heavy water for the reactor under a contract signed in March 1960. After the test, the then US Deputy Secretary of State Kenneth Rush wrote in his telegram to the US mission at the IAEA in Vienna that the United States considers this 'a contravention of the terms under which it was made available.'⁹

The United States had long anticipated an Indian underground test. The National Intelligence Estimate of 1964 of the CIA released by the National Security Archives in November 2012 shows that apprehensions about a fast-advancing nuclear programme were already present at the time.¹⁰ The basis for this was that by 1964 the plutonium-separation plant at Trombay had become operative, capable of extracting plutonium from the spent fuel of the Canadian-supplied CIRUS reactor. In November 1970, the United States presented the Indian Atomic Energy Commission with an aide-mémoire dissuading India from a PNE using American-

⁸ Telegram 6591 From the Embassy in India to the Department of State and the Embassy in the United Kingdom, 18 May 1974, 0600Z, US National Archives, RG 59, Central Foreign Policy Files. Secret; printed in Foreign Relations, 1969–1976, volume XXXV, National Security Policy, 1973–1976.

⁹ Secret Telegram TOSEC 794/104621 From the Department of State to the Mission to the International Atomic Energy Agency, 18 May 1974, 2238Z, US National Archives, RG 59, Central Foreign Policy Files.

¹⁰ "Declassified 1964 National Intelligence Estimate Predicts India's Bomb but not Israel's," NPIHP Research Update 9, <http://www.wilsoncenter.org/publication/declassified-1964-national-intelligence-estimate-predicts-india%E2%80%99s-bomb-not-israel%E2%80%99s> (last accessed 12 November 2012).

supplied technology and materials. It even explicitly stated: 'The United States would not consider the use of plutonium produced in CIRUS for peaceful nuclear explosives intended for any purpose to be research into the use of atomic energy for peaceful purposes.'¹¹ In other words, the American position was the paradoxical assertion that 'peaceful nuclear explosives are not peaceful' if the country in question was India.¹² It is true that India on 18 May 1974 became the first non-nuclear weapon state in the world to have conducted a PNE – a domain that had otherwise been that of the two superpowers.¹³

Very sharp criticism also emanated from Canada, Japan and Australia. India's rebuttal constituted in a paper submitted by Raja Ramanna and R. Chidambaram¹⁴ at the meeting of the IAEA Technical Committee in Vienna in January 1975. The paper provided the IAEA with the technical details of the 12 kiloton implosion experiment and underlined two important points – (a) the test was necessary for studying the potential industrial and engineering uses of PNEs that have been 'recognized' by the IAEA and (b) extensive radiation monitoring and the analysis of air samples after the test showed that 'no radioactivity had been released to the atmosphere during the

¹¹ US Government Aide-memoire sent to the Indian Atomic Energy Commission, 16 November 1970, http://www.nci.org/06nci/04/Historic_Documents_India_Nuclear_Test.htm (last accessed 3 October 2012).

¹² Since the element used in the Indian explosive device was plutonium, professors of political science in the United States studying proliferation risks began to take special interest in the subject. They focused on the quantity of plutonium that was being produced in nuclear reactors around the world. This plutonium was of a highly irradiated variety which although not useful in making weapons, was capable of making a large explosion. Goldschmidt, *The Atomic Complex*, 404.

¹³ The United States began its civil underground nuclear explosions programme in 1957 called 'Plowshare' headed by Edward Teller, after the Rainier test was successfully conducted in September that year. It was believed by both the superpowers that underground nuclear explosions could be used for peaceful purposes like the creation of underground storage capacity for liquid hydrocarbons, extinguishing fires in oil and gas wells, *in situ* cracking of heavy hydrocarbons in bituminous shales or sandstones, etc. Goldschmidt, *The Atomic Complex*, 177-8.

¹⁴ Raja Ramanna and R. Chidambaram were part of the small group of scientists from the Bhabha Atomic Research Centre (BARC), which was responsible for the PNE of 1974. In the months following the PNE, Ramanna, who was then the director of BARC, called for greater powers for the BARC leadership, thus engaging in a bitter power struggle with Homi Sethna, the then chairman of the Indian Atomic Energy Commission. P.N. Haksar Papers, IIIrd instalment, Subject File, Sl. No. 315, Nehru Museum and Memorial Library, New Delhi.

experiment.¹⁵ The latter claim was in response to Pakistan's allegations that it was susceptible to radiation as a result of India's test.¹⁶

No non-nuclear weapon state has repeated this act so far after India. The debate that ensued revolved around the question of indistinguishability of military nuclear explosions from peaceful ones, thereby reflecting the struggle of the non-proliferation regime to grapple with an event unprecedented in its history. India's PNE therefore remained an act that the regime could not illegalize except by retrospective instruments of international law. This was because first, the Partial Test Ban Treaty of 1963 to which India was an original signatory, allowed underground nuclear testing. Second, India could not be charged with violation of the NPT since it never signed it. Third, Article V of the NPT stated that 'potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear-weapon States Party to the Treaty on a non-discriminatory basis'.¹⁷

A NATO secret assessment report of India's PNE originating from the UK Foreign and Commonwealth Office estimated that in the wake of such a successful test India would be able to make a nuclear weapon within six to 12 months, since 'the technology for making and testing an underground device is at least as complex as that required for developing a simple fission weapon'.¹⁸ India with its own uranium and fuel-fabrication and plutonium-separation facilities has 'at least the industrial capacity to produce their own device', it projected. While the report was certain that with its inadequate delivery system, India would not pose a strategic deterrent to China, it suggested a rather interesting alternative. It stated, '(T)he Indians may

¹⁵ Raja Ramanna and R. Chidambaram, "Some studies on India's Peaceful Nuclear Explosion Experiment," in *Proceedings of a Technical Committee on Peaceful Uses of Nuclear Explosions January 20-24, 1975*, (Vienna: IAEA, 1975), 421-36.

¹⁶ Anderson, "The Peaceful Nuclear Explosion Debates."

¹⁷ Treaty on the Non-Proliferation of Nuclear Weapons, 22 April 1970, <http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf> (last accessed 21 November 2012).

¹⁸ NATO Situation Centre Assessment Report, 28 May 1974, Carton 2252, "Questions atomiques: explosion indienne", Dossier 1, Archives Diplomatiques de France, La Courneuve.

consider installing nuclear devices at strategic points near their border with China... In this case little further development of the device exploded would be needed'.¹⁹ The events in India following 18 May 1974, however, did not validate any of the above conjectures.

The Nuclear Suppliers Group (NSG) was formed in 1974 from the previously existing London Club to control nuclear-related exports. The NSG aims to prevent non-signatories to the NPT to receive nuclear technology and information.²⁰ The Threshold Test Ban Treaty signed in July 1974 by the United States and the Soviet Union called for the negotiation of what became known as the Peaceful Nuclear Explosions Treaty (PNET) signed in 1976 (although it did not enter into force until 1990). The PNET allowed the superpowers to carry out PNEs of yield not exceeding 150 kilotons on territories under their own jurisdiction and under the jurisdiction of other states provided they were requested to do so and in compliance with the yield limitations and the provisions of the NPT. The treaty also instituted a comprehensive system of regulations and verification procedures. In other words, through the PNET, the following objectives were attained: (a) peaceful nuclear explosions were established as the exclusive reserve of the superpowers, (b) the authority of the NPT was further strengthened in determining PNEs and (c) the establishment of a legal apparatus that stated that 'there is no essential distinction between the technology of a nuclear explosive device which would be used as a weapon and the technology of a nuclear explosive device used for a peaceful purpose'.²¹ All of these endeavours were retrospective and thus none of them could illegalize the event of 18 May 1974.

¹⁹ *Ibid.*

²⁰ The website of the NSG states that 'the NSG was created following the explosion in 1974 of a nuclear device by a non-nuclear-weapon State, which demonstrated that nuclear technology transferred for peaceful purposes could be misused'. Without naming names, it expounds well its existential rationale. "History of the NSG," Nuclear Suppliers Group, <http://www.nuclearsuppliersgroup.org/Leng/01-history.htm> (last accessed 18 September 2012).

²¹ "Text of the PNET Treaty," US State Department, <http://www.state.gov/www/global/arms/treaties/pne1.html> (last accessed 18 September 2012).

Meanwhile at the IAEA, the discourse surrounding the PNEs at the Ad hoc Advisory Group meetings, shifted from the scientific and the technical to the administrative and the legal.²² In July 1977, India reiterated at the IAEA that the nuclear weapons states' obligation to provide PNE technology to the non-nuclear weapon states should refer to all member states of the IAEA and not to signatories of the NPT, since it itself was a non-signatory to the latter.²³ Avoiding the increasing legality of the debate, India also attempted to outline the scientific/technical differences between a nuclear explosive for peaceful purposes and a nuclear weapon. 'PNE explosive devices', it argued 'are specially designed to have as small a diameter as possible for facilitating underground emplacement'. These devices 'would need inevitable and extensive modifications and additions, to introduce features of transport, delivery and detonation requisite in a nuclear weapon'. Such rebuttals however did not satisfy the keepers of the regime, namely the United States and its allies.

The strongest defence for India however constituted what followed after its underground test. George Perkovich and Raj Chengappa place the decision to begin a weapons programme in 1988-9²⁴ as a response to the nuclear weapons programme of Pakistan that was fast burgeoning with Chinese help. This was the period when India's integrated guided missiles development programme (IGDMP), launched in 1983, was also well-advancing, especially with the successful test of the nuclear-capable Agni missile in May 1989.²⁵ That between 1974 and 1988-9, India made no

²² Anderson, "The Peaceful Nuclear Explosion Debates."

²³ At that time, France, People's Republic of China, South Africa, Brazil, Israel and Pakistan were also non-signatories to the NPT, along with India. Apart from India, Pakistan and Israel, all the other states eventually signed the treaty in the 1990s. In 2003, North Korea withdrew from the treaty and in 2005 the IAEA passed a resolution condemning Iran for violating the treaty by developing nuclear weapons – a charge Iran has denied till date.

²⁴ For a historical overview of this period, see George Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (Berkeley, Los Angeles, London: University of California Press, 1999). See also Raj Chengappa, *Weapons of Peace: The Secret Story of India's Quest to be a Nuclear Power* (New Delhi: Harper Collins, 2000).

²⁵ The Agni was hailed by the then Indian Prime Minister Rajiv Gandhi as a 'technology demonstrator' and India's efforts to surmount the technological backwardness that 'leads to subjugation. Although Indian scientists at the Defence Research and Development Organization argued that the Agni had a range of 2500 kilometres

move to commence on a nuclear weapons programme thus disproves the ‘nuclear fatalism’ of the nuclear non-proliferation regime.

II. The anticipated ‘nuclear fatalism’

The then US Secretary of State Henry Kissinger provided a rather interesting classification of PNEs in his conversation with Indian Foreign Secretary Kewal Singh and Ambassador T.N. Kaul in August 1974.²⁶ Kissinger argued that *intellectually*²⁷ a PNE ‘had a different meaning and significance for a developing country than it has for an advanced country’ because ‘we (United States) can establish criteria with which we can control the nature of a peaceful nuclear explosion with precision’. For a developing country which was in ‘the early stages of nuclear explosion technology, it is not possible to differentiate with this kind of precision’. Kissinger never articulated the details of this ‘intellectual distinction’, as he called it, which went against the logic of the indistinguishability of military and peaceful explosions which the United States otherwise emphasized. Such a distinction drawn by the US Secretary of State tends to prove that claims of discrimination against developing countries in the nuclear domain, made by India and others were not entirely unfounded.

Otherwise, that the United States obstinately refused to distinguish nuclear explosions for peaceful purposes from those for military ends despite PNEs being a recognized category in the IAEA proceedings, is a curious case especially if one perceives that the most important proponent of PNEs in the United States was Edward Teller, the ‘father of the hydrogen bomb’. As early as 1961 and even before his 1968 book *The Constructive Uses of Nuclear Explosives*, Teller praised the Plowshare

and therefore could hit a target in China, foreign intelligence estimates from Russia showed that it could fly only 800 kilometres and that China could not be threatened by it. Perkovich, *India's Nuclear Bomb*, 301.

²⁶ Memorandum of Conversation, Washington, 2 August 1974, Department of State, US National Archives, RG 59, Central Foreign Policy Files, P820097-0933.

²⁷ Author's emphasis.

programme and called for more nuclear testing. He argued that 'real security' and 'real peace' depended on the development of nuclear explosives 'both for defence and for constructive peacetime purposes.'²⁸ Peter Goodchild argues that anxious of the negotiations for test ban treaties, Teller called for PNEs using economic arguments as a means to ensure the continuation of nuclear testing.²⁹ Before May 1974, since only the states that undertook PNE experiments themselves were solely the nuclear weapon states, these experiments provided for them an 'excellent way of justifying the pursuit of underground testing with military implications.'³⁰ This was especially true in the wake of the Partial Test Ban Treaty of 1963, which banned all nuclear testing except for those conducted underground.

In other words, peaceful nuclear explosions were surrounded by ambiguity of intent from the very onset. The meaning of the 'intellectual distinction' that Kissinger suggested was probably this: only nuclear weapon states could 'rightfully' conduct peaceful nuclear explosions because these states had already crossed the nuclear threshold and hence they contributed to no new fears of proliferation. When a non-nuclear weapon state conducted a PNE, it was automatically assumed as having a non-peaceful intent, by the keepers of the non-proliferation regime because of the dubious roots that PNEs have had for the keepers themselves. The adverse reaction of the regime to India's PNE can perhaps be explained as 'Freudian projection'.³¹ Projection is a psychological defence mechanism by which a subject attributes to someone other than herself a trait, affect, impulse, or attitude that is actually hers but is too painful and disturbing and therefore unacceptable to herself as her own.³² This

²⁸ Edward Teller, "The Case for Continuing Nuclear Tests," *Headline Series* 145 (1961): 57.

²⁹ Peter Goodchild, *Edward Teller: The Real Dr Strangelove* (Cambridge, MA: Harvard University Press, 2004), 284-95.

³⁰ Goldschmidt, *The Atomic Complex*, 175.

³¹ It is named after Sigmund Freud who propounded it and his youngest daughter Anna Freud who further refined the concept. For a detailed analysis of projection see Sigmund Freud, "Psychoanalytic notes upon an autobiographical account of a case of paranoia (Dementia paranoides)," in *Collected Papers Volume III*, Sigmund Freud (London: Hogarth Press and Institute of Psycho-Analysis, 1925).

³² Projection of A's own feelings and/or attitudes on B helps A to justify having those feelings and/or attitudes. For example, "I hate him" is projected onto "he hates me (and this justifies my hating him)." Stanley Blumberg

lies at the core of the regime's faith in 'nuclear fatalism,' by which it projects its own ambiguities towards peaceful uses of nuclear energy onto the 'other,' namely the non-nuclear weapon states.

The following four sub-sections will investigate the potential inducements for a state to weaponize, and test them against the Indian case.

a. Nuclear prestige

The convergence of the Second World War with the discovery of nuclear fission in 1939, and, the end of the War, the bombings of Hiroshima and Nagasaki in 1945, ensured that the nuclear question remained paramount in international politics for decades to come. Nuclear weapons which thus began to be equated with the instruments of the victorious began to embody the highest form of scientific expertise of the twentieth century and the ultimate symbol of humankind's mastery over nature. The nuclear question thus came to be intrinsically associated with national prestige in the post-World War II order. When national prestige is associated with a certain element, whether it is weapons or architectural buildings, states have not dithered from mobilizing huge amount of resources for the attainment of that element. Besides, nuclear weapons have also been believed to be the great leveller against conventional weaponry and therefore a vital source of national security.

Although the economic cost of the Indian PNE was not much (US\$ 10-20 million, estimated by US Department of State), a full-fledged weaponization programme would have cost several times more. National prestige through nuclear weapons could have justified such expenditure. India however maintained throughout that it

and Brendan A. Maher, "Trait Attribution as a Study of Freudian Projection," *The Journal of Social Psychology* 65 (1965): 311.

lacked the economic resources to embark on a weapons programme. Years before the underground nuclear test, in February 1969, in the face of a question on the manufacture of the atomic bomb by India in the Upper House of the Indian Parliament, Prime Minister Indira Gandhi stated that the core of India's security lay in industrial and economic strength and that India ought not to panic about the nuclear power of one of its next door neighbours (meaning China). She asserted, 'Let us not undermine the growth of our economy by diverting resources towards that end (i.e., the nuclear bomb)'.³³

In fact, the Indian justification for its PNE, as already mentioned, was economic: the potential industrial and engineering benefits of PNE could bring forth economic benefits for the country and therefore should be pursued and the nuclear non-proliferation regime therefore must make PNE technology available to developing countries owing to the economic benefits that it could potentially bring about. In other words, mastery over nuclear technology was associated with the national development programme by the Indian political elites, which made a weapons programme unjustifiable.

b. The domestic tumult

A tumultuous political scene is often the rationale for the invocation of national security concerns by the political elites in power as a typical tactic of 'rallying around the flag.' As nuclear weapons are related to national security, national nuclear weapons programmes can be potentially used as a bait to control political opposition in the face of domestic political crises. Following the split in the Congress Party in 1969, Mrs Indira Gandhi struggled to establish an organizational base in her own party and her position was far from secure until the landslide victory at the

³³ Rajya Sabha starred question no. 82 dated 20 February 1969, File U-IV/125/3/69, MEA Files, National Archives of India, New Delhi.

general elections of 1971. Although won on the populist slogan of *garibi hatao* (eradicate poverty), the economic cost of the 1971 war with Pakistan and the oil price shock of 1973 created economic difficulties for her government throughout the 1970s. Furthermore, when in June 1975 the Allahabad High Court invalidated her 1971 electoral victory citing election malpractices, Mrs Gandhi imposed National Emergency on the country and suspended regular political activities. The 21-month period which lasted till March 1977 witnessed for the first time in the history of Indian democracy, an authoritarian government in New Delhi, with freedom of expression being suppressed, political opponents arrested, forced sterilizations of the poor for population control and modifications of the Constitution.

At the post-Emergency general elections of 1977, the Congress party lost power nationally for the first time and a Janata Party government led by Indira Gandhi's longtime opponent, Morarji Desai came into office. Desai was himself a strong opponent of the nuclear bomb and of conducting further tests. As soon as he came to power, he declared a complete review of the operations and structure of the Department of Atomic Energy³⁴ and removed Raja Ramanna from the leadership of the Bhabha Atomic Research Center (BARC) to the Ministry of Defence in New Delhi. Desai's government however was short-lived and Indira Gandhi returned to power in 1980. When scientists of the Indian AEC tried to encourage Mrs Gandhi to move towards the bomb, she replied, 'I am basically against weapons of mass destruction'.³⁵

It is possible to argue that the domestic political scene was too unstable for a strong decision authorizing a weapons programme. Yet, it is in moments of such instability that the tactic of 'rallying around the flag' operates best in fanning nationalist

³⁴ Robert S. Anderson, *Nucleus and Nation: Scientists, International Networks and Power in India* (Chicago, University of Chicago Press, 2010): 500.

³⁵ V.S. Arunachalam (in 2000, the head of the Defence Research and Development Organization), quoted in Chengappa, *Weapons of Peace*, 257-60, 287.

sentiments to distract attention from immediate pressing problems. I therefore argue that the Indian nuclear programme was equated with national development³⁶ during this period and not with national security. As a result of this, the security potential of the nuclear programme was not espoused despite India's capacity to do so.

c. *Unstable regional security environment*

Shortly after the India-Pakistan War of 1965, Zulfikar Ali Bhutto, who was then a senior member in Ayub Khan's government, declared that nuclear weapons were now an imperative for Pakistan. He said at a press conference, 'If India builds the bomb, we will eat grass or leaves, even go hungry, but we will get one of our own. We have no alternative'. Bhutto was probably reacting to the Indian plutonium reprocessing plant (Dhruva) that was inaugurated in January 1965. Besides, an American arms embargo in the wake of the war of 1965 was undermining Pakistan's conventional military capability.³⁷ The Sino-US rapprochement brought the United States closer to Pakistan. Pakistani President Yahya Khan aided Henry Kissinger's secret visit to China in October 1970, much to the alarm of New Delhi. While the war with Pakistan in 1971 ended decisively in India's favour and the Simla Agreement signed in 1972 called for normalization of relations between the two countries, the bilateral ties were nowhere near improvement. In January 1972, Bhutto (who by then had become the Prime Minister of Pakistan) assembled his eminent scientists in

³⁶ India's first Prime Minister Jawaharlal Nehru, underlined the developmental aspect of the atomic energy programme in a speech he delivered in New Delhi in January 1947, seven months prior to Independence. He said, "(A)tomtic energy is going to play a vast and dominating part, I suppose, in the future shape of things... it will make power mobile, and this mobility of power can make industry develop anywhere. We will not be tied up by the accidents of geography. Atomic energy will help cottage industry." Jawaharlal Nehru, "The Necessity of Atomic Research," Extracts from a speech after laying the foundation stone of the National Physical Laboratory at New Delhi on 4 January 1947; Reproduced in *Pandit Jawaharlal Nehru on Atomic Energy* (Bombay: Bhabha Atomic Research Centre, 1989).

³⁷ Zafar Iqbal Cheema, "Pakistan's Nuclear Use Doctrine and Command and Control," in *Planning the Unthinkable: How New Powers will use Nuclear, Biological and Chemical Weapons?*, ed. Peter Lavoy et al. (Ithaca, NY: Cornell University Press, 2000), 162.

Multan and 'announced his desire and decision to make Pakistan a nuclear weapons state'.³⁸

China's first nuclear test in Lap Nor in October 1964 transformed the already antagonistic neighbour into a nuclear adversary. In 1969, the testing of the Chinese hydrogen bomb led to a renewed debate in the Indian parliament on the 'manufacture of an atomic bomb' to deter its neighbour. Prime Minister Indira Gandhi responded, 'While the Government's policies in respect of defence and security of the country are kept constantly under review, their commitment to utilise nuclear energy exclusively for peaceful purposes remains unaltered'.³⁹

The role of the United States in the Indo-Pakistan situation post-May 1974 can probably be best articulated in the White House memorandum of conversation between Henry Kissinger and Zulfikar Ali Bhutto in Islamabad during the former's visit to the subcontinent in October 1974. Bhutto asked Kissinger, 'But don't you come from New Delhi thinking that India is really expansionist?' Kissinger replied, 'After seeing India, I am thinking about supplying nuclear weapons, not only conventional arms, to Pakistan and even Bangladesh! There seems to be a difference between what they say and what they mean'.⁴⁰ The United States however refused to support Pakistan's call for a South Asian Nuclear-Free Zone at the United Nations in December that year.

In 1976, Pakistan and France signed an agreement for a reprocessing plant, much to the vexation of the United States. President Gerald Ford wrote a letter to Bhutto in March 1976 expressing his concerns at 'the lack of a persuasive economic justification for obtaining sensitive nuclear facilities' in Pakistan's case. He urged

³⁸ J.N. Dixit, *Across Borders: Fifty Years of Indian Foreign Policy* (New Delhi: Picus Books, 1998), 437.

³⁹ Rajya Sabha starred question no. 82 dated 20 February 1969, File U-IV/125/3/69, MEA Files, National Archives of India, New Delhi.

⁴⁰ Secret Memorandum of Conversation, Islamabad, 31 October 1974, US National Archives, RG 59, Records of Henry Kissinger, Entry 5403, Box 5, Nodis Memoranda of Conversations, November 1974.

Pakistan to forego plans to acquire reprocessing and heavy water facilities until its nuclear programme is 'sufficiently developed to establish a clear need'.⁴¹ While Pakistan refused to reconsider, the United States managed to convince France to terminate its help to Pakistan in 1979. However, during this period Pakistan managed to begin and sustain what is believed to be its nuclear weapons programme, codenamed Project 706, led by Munir Ahmed Khan and later joined by A.Q. Khan. Pakistan was receiving clandestine help from the Chinese throughout the 1980s enabling it to advance further in its weapons programme.⁴²

The regional security environment was therefore highly antagonistic for India, thus opening up a possible argument in favour of the development of nuclear weapons. This however, did not happen.

d. Strained relations with the United States

India's relationship with the United States was at an all-time low during this period. Not only did the Sino-US rapprochement make New Delhi anxious about an emerging US-China-Pakistan axis, it also introduced the anxieties of the Cold War into the subcontinent. Insecurities led to the conclusion of the Treaty of Peace, Friendship and Co-operation with the Soviet Union in August 1971. During the war with Pakistan in December 1971, President Nixon sent the US Seventh Fleet into the Bay of Bengal as a move to deter India's attempt to 'liberate' East Pakistan. The Fleet included the nuclear-powered USS *Enterprise*, which was also the largest and most modern aircraft carrier of the United States at the time.⁴³ Apart from claiming that

⁴¹ Letter from President Ford to Pakistani Prime Minister Bhutto, Washington, 19 March 1976, Ford Library, National Security Adviser Files, NSC Staff Files for Middle East and South Asian Affairs: Convenience Files, Box 20, Pakistan (2).

⁴² "Pakistan's growing nuclear programme," BBC News, 1 December 2010, <http://www.bbc.co.uk/news/world-south-asia-11888973> (last accessed 18 September 2012).

⁴³ Jacques E.C. Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions and Foreign Policy* (New York: Cambridge University Press, 2006), 184.

India's PNE was 'a bomb no matter how India described it',⁴⁴ the Ford Administration continued to supply arms to Pakistan like the preceding Nixon Administration, much to the distress of New Delhi. The United States however found India's critique of arms sales to Pakistan 'obsessive' and refused to pay it any attention.⁴⁵

Although efforts were launched to improve the bilateral relationship, they did not succeed in breaking the ice. The US-India Joint Commission was established in October 1974 to facilitate high-level exchanges in the fields of economy and commerce, science and technology and education and culture. While India welcomed the creation of this Commission, it remained dissatisfied with the amount of food assistance that it received from the United States under PL480.⁴⁶ Mutual distrust dominated their ties and many in Washington shared the notion that Mrs Gandhi had 'almost a pathological need to criticise the United States'.⁴⁷ Kissinger agreed with Bhutto during their meeting in Islamabad in October 1974 that India had a 'hegemonial tendency in the sub-continent' and that the 'Monroe Doctrine idea may not be so far off'.⁴⁸

In April 1975 Kissinger sent a telegram to US Ambassador Saxbe in New Delhi strongly reacting against the anti-US criticisms publicly emanating from higher echelons of the Congress Party. He was reacting against Congress Party President Barooah's allegations that US arms supplies to Pakistan were destabilizing the continent. He urged Saxbe to remind the Indian Government of the restraint the United States exercised in its public reaction to the nuclear test of May 1974 despite

⁴⁴ Memorandum From the President's Deputy Assistant for National Security Affairs (Scowcroft) to President Ford, Washington, 28 October 1974, Ford Library, National Security Adviser, Trip Briefing Books and Cables for Henry Kissinger, Box 2, 20 October - 9 November, HAK Messages for President.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*

⁴⁸ Secret Memorandum of Conversation, Islamabad, 31 October 1974, US National Archives, RG 59, Records of Henry Kissinger, Entry 5403, Box 5, Nodis Memoranda of Conversations, November 1974.

Congressional pressure and from most of its allies. He also retorted Barooah's claims citing that Islamabad had requested no new arms from Washington while American intelligence had information that New Delhi and Moscow were in the midst of concluding a major arms deal. The telegram ended with the warning that 'continued lack of restraint on public statements will inevitably trigger new downward spiral in Indo-US relations' and such public expression of criticisms 'is incompatible with the kind of new mature relationship we thought our two governments had agreed we would pursue'.⁴⁹

Another thorn in the relationship encompassed the Tarapur Atomic Power Station, which comprised two boiling water reactors (BWR) of 160 megawatts each, built as a turn-key project by General Electric and Bechtel, as a result of an agreement signed between India and the United States in 1963. After India's underground nuclear explosion in 1974, the United States began to call for full-scope IAEA safeguards in any nuclear cooperation with India, to which the latter continuously refused. India criticized the United States for going against the original terms of the agreement and thereby obstructing India's capacity for generating nuclear power, vital for its national development. In 1978, the Nuclear Non-Proliferation Act that was passed in the United States made it mandatory for states receiving US nuclear technology to accept full-scope IAEA safeguards and submit to IAEA inspections in order to continue technological cooperation. Since India ardently maintained its refusal on grounds of national sovereignty, the United States thus compelled by its domestic legislation, decided to terminate the supply of fuel for Tarapur in 1979.⁵⁰ A solution was however found in 1982, before Prime Minister Indira Gandhi's meeting with President Ronald Reagan. It was decided that a tripartite agreement would be

⁴⁹ Telegram 97347 From the Department of State to the Embassy in India, 26 April 1975, 0213Z, US National Archives, RG 59, Central Foreign Policy Files. Secret.

⁵⁰ "Selected Indian Facilities: Tarapur," Monterey Institute of International Studies, http://cns.miis.edu/archive/country_india/nucfacil/tarapur.htm (last accessed 3 July 2012).

established and France would replace the United States as the fuel supplier for Tarapur from 1983.

The distrust and the strain in the relations could have been used as justifications for going nuclear, especially since international criticism of its nuclear test did not abate, mistrust of its intentions dominated in the international community and technological sanctions from the nuclear technology regime created difficulties for its civil nuclear programme. Thus, the damage to India's international relations was already done. After several rounds of talks, Canada stopped its nuclear co-operation with India in light of the latter's PNE, allegedly accomplished with plutonium produced from the Canadian-supplied CIRUS reactor.

The portrayal of the nuclear programme as necessary for national economic development and India's science and technology-driven catching up, had resonance throughout the domestic political spectrum. Its thorny relationship with the United States and the non-proliferation regime was therefore articulated as a vindication of India's anti-colonial stance against a regime led by superpowers and their allies, bent on impeding India's sovereign right to seek national development through atomic energy. It is noteworthy that in the wake of the National Emergency, when Morarji Desai known for vehemently opposing nuclear weapons, came to power in 1977, India did not attempt to sign the NPT. India, however, did not opt for an open defiance of the regime either. It instead kept providing assurances to the United States and the world that its intent vis-à-vis uses of atomic energy was a peaceful one.

III. A 'third (nuclear) way'?

May 1974 was significant in the history of the global order not just for India's first nuclear test. It was also when the countries of the 'Global South' united to adopt UN

General Assembly Resolution 3201 on the 'Declaration on the Establishment of a New International Economic Order' (NIEO). This resolution was accompanied by UNGA Resolution 3202 on the 'Programme of Action on the Establishment of a New International Economic Order'. The NIEO was to be based on 'sovereign equality, interdependence common interest and co-operation amongst all States' with the goal to 'correct inequalities' and 'eliminate the widening gap between the developed and the developing countries'. Seven months later, at the twenty-ninth session of the UN General Assembly on 12 December 1974, the Charter of Economic Rights and Duties was adopted by a vote of 115 to 6 with 10 abstentions.⁵¹ India played a significant role in this endeavour as a member of the Group of 77 (G-77) and a non-aligned country.

The call for a NIEO was a response to the inflation, recession and crisis that the global economy was facing such that the developing countries came together to seek a larger voice in the international financial order. India's role was instrumental in this. When the Organization of the Petroleum Exporting Countries (OPEC), during the Yom Kippur War in October 1973, reduced oil production and placed an embargo on the shipment of crude oil to countries that supported Israel in the war (specifically the United States and the Netherlands), oil prices rose around the world leading to the oil price shock of 1973-74. This 'cartel action' by OPEC manifested for the first time that developing countries could wield 'commodity power' vis-à-vis the developed ones, thus becoming a source of celebration for the countries of the Global South, then known as the 'Third World'. The NIEO was therefore the continuation of what the OPEC had started, namely, opposition to a world order led by the United States and its allies.⁵²

⁵¹ UN General Assembly Resolution 3281 (XXIX), 12 December 1974, <http://www.un-documents.net/a29r3281.htm> (last accessed 21 September 2012).

⁵² For a detailed analysis of the call for a 'new international economic order' by the less-developed countries and proposed desirable responses by developed countries see, Jagdish Bhagwati, ed., *The New International Economic Order: The North-South Debate* (Cambridge, MA: MIT Press, 1978).

What tied the NIEO with the debate over PNEs was the dimension of ‘transfer of technology,’ which was enlisted under Article 13 of the Charter of Economic Rights and Duties of 1975. Under Article V of the NPT, nuclear weapon states were expected to make available to non-nuclear weapon states potential economic benefits from any peaceful applications of nuclear explosions through international or bilateral agreements on a non-discriminatory basis. Efforts were launched following India’s test of 1974 to gradually write off Article V from the NPT until the Comprehensive Test Ban Treaty when it automatically became a dead letter. At the NPT Review Conference of 1975 held in Geneva, the parties to the Treaty observed that PNE technology ‘is still at the stage of development and study’ and that it entails a series of ‘interrelated international legal and other aspects’ that ‘still need to be investigated.’ The Conference bestowed the responsibility to pursue study and discussion on PNE technology on the IAEA and stated that access to PNE technology must ‘not lead to any proliferation of nuclear explosives.’⁵³ This view was reiterated at the Review Conference of 1980. India, being a non-signatory to the NPT, participated in neither Review Conference. However, the developments at these Conferences with regard to Article V were in many ways a reflection of the successful testing of the implosion device by India in May 1974.

During this period, Indira Gandhi continued her calls for nuclear disarmament on international platforms. In 1984, she proposed the Five Continent Initiative for a world free of nuclear weapons, along with Presidents Raul Alfonsin of Argentina, Miguel de la Madrid of Mexico, Julius Nyerere of Tanzania, Prime Minister Andreas Papandreu of Greece and former Prime Minister Olof Palme of Sweden.⁵⁴ Nuclear disarmament was enshrined as an integral part of general and complete

⁵³ Proceedings of the NPT Review Conference of 1975, Geneva, NPT/CONF/30/Rev.1, <http://www.un.org/disarmament/WMD/Nuclear/pdf/finaldocs/1975%20-%20Geneva%20-%20NPT%20Review%20Conference%20-%20Final%20Document%20Part%20I.pdf> (last accessed 22 September 2012).

⁵⁴ Olafur Grimsson and Nicholas Dunlop, “Indira Gandhi and the Five Continent Initiative,” *Bulletin of the Atomic Scientists* 41 (Jan. 1985): 46.

disarmament. Interestingly, she established connections between disarmament and development in such a way that not only intertwined the call for NIEO with the argument for PNE, but also made India's arguments in favour of both very convincing. She stated in 1976 that 'development is linked with disarmament' and that it was a 'tragic paradox that nations spent 75 times more on armament than on developmental assistance to weaker nations'.⁵⁵ This third way, as espoused by India, encompassing the economic aspect of the non-aligned movement, calls for universal nuclear disarmament and for developmental benefits of peaceful nuclear explosions, further strengthened the normative challenge posed by India to the nuclear non-proliferation regime.

Conclusion

India's nuclear test of May 1974, although not a violation of the international legal framework existing at the time, was a defiance of the United States, which in its aide-mémoire of November 1970 had categorically warned against an Indian nuclear explosion, whatever its justification. The United States did not seem worried that the 'near nuclear' of the time, namely Israel, South Africa and Japan, would follow the Indian example,⁵⁶ although it believed that India indeed had set a poor example for the regime. American concerns concentrated essentially on two aspects: ascertaining the impact of the test on the NPT, especially with the NPT Review Conference scheduled for 1975, and the reaction of Pakistan.⁵⁷ As the preceding sections demonstrated, the period was marked by not merely a conflictual Indo-US relationship, but also an unstable regional security environment.

⁵⁵ S. K. Dhawan, *Selected Thoughts of Indira Gandhi* (Mittal: New Delhi, 1985), 83-4.

⁵⁶ Telegram TOSEC 794/104621 From the Department of State to the Mission to the International Atomic Energy Agency, 18 May 1974, 2238Z, US National Archives, RG 59, Central Foreign Policy Files.

⁵⁷ *Ibid.*

Yet, despite provocations and anticipations India steered clear of embarking on a nuclear weapons programme during this period despite its demonstrated ability to master the technology of nuclear explosions. It is notable that on 18 May 1974, peaceful nuclear explosions for the first time in their history emerged out of the preserve of superpowers. It was the only time that a non-nuclear weapon state had used its own technological knowhow for a PNE instead of seeking a 'nuclear explosions service' from a nuclear weapon state under Article V of the NPT. This Indian nuclear limbo that challenged the conventional wisdom of 'nuclear fatalism' and the linearity of the 'proliferation paradigm',⁵⁸ remains to date a normative challenge to the very assumptions of the nuclear non-proliferation regime.

By tying its nuclear diplomacy to the economic component of the non-aligned movement and calls for a fairer global order, India gave the issue a more expansive focus. This was because, during this period, India's nuclear programme was integral to its understanding of national development instead of its national security needs. When India eventually embarked on a nuclear weapons programme in 1988-9, it justified itself by citing the perceived security threat from China and Pakistan, especially in light of the former aiding the nuclear weapons programme of the latter. Yet, Pakistan began a weapons programme soon after India's PNE and the regional security environment after 1974 remained far from peaceful. That India did not commence a nuclear weapons programme at the time can only be explained by India's perception of its nuclear programme as part of its economic imperative of national development instead of its national security concerns.

Between 1974 and 1988-9, India's nuclear diplomacy thus, posed a normative challenge to the Murphy's Law of 'nuclear fatalism' of the non-proliferation regime. It helped India to justify itself as a restrained power and to drive home an image of the 'righteous wronged' vis-à-vis the regime that remained critical of it. That this act

⁵⁸ Pelopidas, "The Oracles of Proliferation," 301-3.

of 'dissidence' came from a recognized democracy and not from a pariah state only strengthened India's case. The regime could neither overlook it nor discard it as an aberration.

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