



The Evolution of Indian Nuclear Thought

Ali Ahsan

Introduction

India is the largest country in South Asian region with a population of over a billion people. It is a growing economic and military power with an ambitious nuclear weapons program. Modern India regards itself as an extension of the ancient Vedic Hindu civilizations and takes immense pride in its history, culture, diversity, and its native religious beliefs.¹An educated elite, and a functioning system of governance inherited from the British Raj developed a unique Indian strategic culture. It views India as a potential great power surrounded by a testing, if not hostile, neighborhood. Historic tensions with Pakistan, which included three major wars and unresolved bilateral disputes, and border disputes with China meant that New Delhi would need to enhance and consolidate its national security. At the same time, a desire for global respect drives India to be regarded as an equal to the developed world in every aspect. It has already been recognized as the largest democracy in the world and as time passes is taking necessary steps to become a major military and economic power as well.

Nuclear technology has always been seen enviously by states as a source of scientific excellence, technological prowess, and political pride, though few have been able to acquire it. Some states view nuclear weapons guaranteeing their survival and means for promoting their interests in a world where no real system exists to control state behavior. India had these factors in mind when it embarked on working to fulfill its desire for internal success, regional dominance, and global prestige. The ever-changing dynamics of South Asia have had an impact on Indian strategic thought as well and, as a result, impacted on its nuclear posturing. Such changes also impacted on deterrence stability in the region and raised tensions. In order to understand India's nuclear policy, it is important to also see the decisions New Delhi took to go nuclear and how it is likely to behave in future.

Road to PNE (1947-1974)

As long as the world is constituted as it is, every country will have to devise and use the latest devices for its protection. I have no doubt India will develop her scientific researches and I hope Indian scientists will use the atomic force for constructive purposes. But if India is threatened, she will inevitably try to defend herself by all means at her disposal: Jawaharlal Nehru' speech on 26 June 1946 in Bombay.²

Long before the end of the British Raj, India's first Prime Minister Nehru wished India to use science in order to become a self-reliant power.³ The atomic bombings of Japan by the United States in August 1945 shook the world. Since then role of nuclear weapons in international relations and national security has been under intense debate. Scott D. Sagan identified three main models for the nuclearization of states; the 'security model', which attributes nuclearization to reasons of national security, 'the domestic politics model', which attributes it to parochial political and bureaucratic interests of politicians, and the 'norms model', which posits that nuclear weapons are often developed as a nation's symbol of power and pride.⁴

In India's case, all three models applied. India advocated complete global nuclear disarmament and Gandhian idea of non-violence as part of its non-aligned foreign policy without completely dismissing the idea of obtaining nuclear weapons of its own. Indian physicist Dr. Homi J.Bhabha advocated nuclear technology for India and spearheaded the initial decades of India's nuclear program.⁵ India's defeat by China in the 1962 war and Chinese nuclearization in 1964 permanently etched Beijing as a strategic rival in New Delhi's thinking. The 1965 war with Pakistan further reinforced its belief of protecting India from external threats by any means.

India's humiliation of Pakistan in the 1971 war "whetted the appetite for the bomb."⁶ Taking weapons-grade Plutonium produced at the unsafeguarded CIRUS reactor, India assembled and tested a nuclear device on 18 May 1974 and labeled it a 'peaceful nuclear explosion' (PNE) at the same time denying that it had a nuclear weapon programme.⁷ India thus maintained ambiguity about its nuclear intentions. The West criticized India for going against its civil nuclear commitments, and established the Nuclear Suppliers Group (NSG) in 1975 to curtail misuse of nuclear technology. Pakistan reacted in horror, and also decided to follow the nuclear path.⁸

Road to 'Operation Shakti' and Initial Doctrinal Thinking (1974-1999)

Nuclear ambiguity suited India after 1974 as it repeatedly rejected Pakistan's calls for nuclear restraint in South Asia and refused IAEA safeguards under its cover. Indo-Pak tensions heightened since mid-1980s over Siachen, Khalistan, Kashmir and *Brasstacks* stand-off. But fears of a nuclear exchange, shrewd diplomacy by Islamabad, and pressure from the US stopped a war from happening.⁹

Zafar Iqbal Cheema says this ambiguity inevitably led to fully integrating nuclear weapons in India's armed forces and national security thinking.¹⁰ India also regarded nuclear weapons as a short cut to a permanent seat in the UN Security Council.¹¹ On the eve of CTBT formulation in the UN, advanced states like China and France conducted nuclear tests in the mid-1990s in order to update their bomb designs. Both India and Pakistan agreed that CTBT was denying non-NPT states like themselves from carrying out nuclear tests.¹² India repeatedly rejected CTBT over discrimination favoring the 'recognized' five nuclear weapons states (P5) with no mandate being set for global disarmament, especially after NPT was indefinitely extended in 1995.

The rise of right-wing Hindu nationalism in the same era, led by the Bharatiya Janata Party (BJP), sought to present a more assertive India. Even BJP's short-lived governments of 1996 and 1997 had made plans to conduct nuclear tests. BJP also promised to add to India's nuclear arsenal in its successful 1998 electoral campaign.¹³ 'Operation Shakti' (*Pokhran-II*) took place on 11-13 May, 1998 with the nuclear tests celebrated nationwide as Home Minister L.K. Advani boasted that the regional strategic balance now permanently favored India.¹⁴ This forced Pakistan to promptly respond with its own nuclear tests on 26-28 May, 1998 to restore parity.

The first statement giving the rationale for the tests was offered by Prime Minister Vajpayee, not to the people of India, but to US President Clinton offering cooperation on nuclear disarmament.¹⁵ New Delhi had hoped it would help overcome decades of apathy by the US and India would be recognized as a serious regional player. PM Vajpayee also laid out the basic principles of India's nuclear thinking in a speech to the *Lok Sabha* stating that its nuclear weapons were not meant for aggression, not bound by Cold War ideas, and again repeated need for

global disarmament.¹⁶ On 4 Aug 1998, the crux of India's nuclear doctrine was announced with 'Minimum Deterrence' and 'No First Use' (NFU).¹⁷

Kargil Crisis and India's Draft Nuclear Doctrine 1999

The Kargil crisis (May-June 1999) raised questions on how nuclear weapons impacted on regional security as India accused Pakistan of using 'nuclear blackmail' in Kashmir for fomenting sub-conventional threats.¹⁸ Although, India had been considering making parts of its nuclear policy more transparent in order to lend its deterrence more credibility, Kargil gave it extra urgency. It also aimed to portray Pakistan as an irresponsible, reckless, and aggressive state. Eventually, India's National Security Advisor Brajesh Mishra released a 'draft nuclear doctrine' DND on 17 August 1999 which contained certain aspects of the doctrine.¹⁹

The DND begins with a preamble (Article 1) with a typical Indian traditional justification for pursuing nuclear weapons, at the same time calling such weapons as 'the greatest threat to humanity.' It stated that India will have a credible minimum deterrence posture and that India will "not be the first to initiate a nuclear strike, but will respond with punitive retaliation should deterrence fail" (2.3). It also stated that India will not use or threaten to use nuclear weapons against non-nuclear states (2.5). It further added that India will pursue a 'triad' of land-, sea-, and air-based deterrence platforms for its nuclear forces, and shall minimize readiness times in order to react quickly to any strategic threat (3) and possess a second-strike capability (4.3.i).

On closer inspection, DND appears to be a mere formality as it gives a generalized information about India's nuclear policy. It gives the impression of India developing an expansive war-fighting force structure without specifying India's adversaries and strategic threats. It also did not quantify what it meant by 'minimum' deterrence and how many nuclear weapons will it consider 'minimal.' Pakistan was quick to regard DND as offensive, provocative in nature, and that it threatened regional security and global stability. Naeem Salik observes that the 'draft' nature of the doctrine meant that India could back track on it as it was not a formal policy document.²⁰ It fell more in the category of declaratory statements without any binding obligations, and subject to future changes as India deemed fit. No assurances have been offered by India over its NFU policy as well, especially since India has repeatedly called into question China's NFU.

9/11, Indian Parliament attack, and Operation Parakram 2001-02

On 13 December 2001, the Indian Parliament was allegedly attacked by Kashmiri jihadis. India accused Pakistan for it and mobilized its troops along the border under 'Operation Parakaram', the largest Indian military deployment since 1971. However, its main strike corps were scattered across the country making deployment slow as Pakistan also mobilized its force to defend against a possible attack.²¹The ten month standoff didn't escalate into an all-out war as world powers persuaded both sides to get back to negotiations.²²

A fear of mutually assured destruction kept both sides from firing the first shot. World powers too were fearful of the consequence of a possible nuclear exchange between the two adversaries. Deterrence prevailed as both sides resumed their peace process. The slow mobilization of Operation Parakaram conducted under Sundarji doctrine was viewed as a strategic blunder in India as it had failed to put sufficient pressure on Pakistan. The possession of nuclear weapons by Pakistan led India to consider a limited war-fighting doctrine that could punish Pakistan in future terrorist incident suspected of sponsored by Islamabad, but also avoid its escalating into a nuclear exchange. This made Indian Army's 'Cold Start Doctrine' (CSD) take shape to replace the Sundarji Doctrine for a more mobile and quick war-fighting strategy.

Cold Start and DND Review (2003-2013)

Under the Cold Start strategy, eight Integrated Battle Groups (IBGs) with air support would launch surgical strikes on Pakistani soil within 72 hours of a terror attack, destroying key strategic assets, capturing some territory as negotiation leverage, and leaving no time for Pakistan to respond diplomatically or militarily.²³ Cold Start- later rephrased as 'Pro Active Strategy' (PAS) - was never officially endorsed by New Delhi, although the military has likely adopted it while maintaining official plausible deniability.²⁴

New Delhi also, in the meanwhile, reviewed and updated its DND in order to operationalize it in 2003. The updated text re-affirmed India's commitment to NFU but with significant modifications. It considered a nuclear, biological, or chemical weapons attack on India or on Indian forces anywhere in the world a justification

for massive retaliation (Articles 2.3, 2.4, 2.6). India also reiterated its pledge not to use nuclear weapon against non-nuclear weapons states (2.5), and appointed a Commander-in-Chief (C-in-C) for its Strategic Forces Command (SFC) (2.1; 5.).

Also, India established its Nuclear Command Authority (NCA) as a two-layered structure comprising a Political Council and an Executive Council.²⁵ The Political Council is chaired by the Prime Minister and is the sole body which can authorize the use of nuclear weapons. The Executive Council chaired by the National Security Adviser and comprising the scientific advisor, services chiefs and relevant senior bureaucrats, provides inputs for decision making by the NCA and executes the directives given to it by the Political Council. Maintaining primacy of civilian control and minimizing military role in all nuclear decision-making is evident which can lead to a civil-military dichotomy in implementing Indian nuclear strategy.

P.R. Chari called the whole draft doctrine an inadequate exercise as it failed to factor in the threat of violent non-state actors (VNSAs) that cannot be deterred by nuclear weapons at all. Furthermore, he argued that the doctrine does not clearly identify what a “major” WMD attack is and how the perpetrator will be identified and linked to a state for Indian nuclear retaliation to be justified.²⁶ India’s doctrine still used ambiguous language that does not guarantee a purported ‘defensive nature’ as VNSA threat increasingly risks dragging whole of South Asia into war. He further argued that the Indian SFC does not follow a single line of authority due to its different role from conventional forces because of historic tussles between the civil and military bureaucracies for greater say in policy-making.²⁷ However, the civil government’s continued mistrust of the military in decision-making remains a factor. The 2003 review was likely also made in anticipation of any Pakistani attempt to deter India from even a limited conventional war. However, it immediately made India’s NFU posture fall into question by giving an impression that New Delhi was considering a ‘first strike.’ This significantly lowered the nuclear and threat thresholds and posed an even greater risk of nuclear conflict in South Asia, as well as leading to an economically unviable arms race in the region.²⁸

India’s intention of increasing synergy of its strategic and conventional military capabilities to dominate a crisis and prevail over the enemy did not guarantee that Pakistan may not use a nuclear response in the eventuality of an attack on its territory. Reacting to Indian’s nuclear doctrinal review of 2003 Pakistan declared that India was being a reckless and an irresponsible state willing to wage war in

response to terrorist attacks from VNSAs that also challenge Pakistan's internal stability. In order to restore the balance which had tilted in India's favour by Indian CSD and DND review Pakistan developed Short Range Ballistic Missiles (SRBMs) like Hatf-IX (NASR) to deter India at all rungs of the threat spectrum.²⁹

US-India Nuclear Deal, 2005-2008

Much of the above mentioned developments took place under the BJP rule in India, which eventually ended in 2004 when a Congress-led coalition was voted into power. Under premiership of Dr Manmohan Singh, India decided to utilize its growing economic clout to forge better ties with major powers, improve its defense, and become a major player in South Asia. The Bush Administration recognized this intent, and after much deliberations and amendments in legislation, offered the 123 Agreement to India for a civil nuclear deal on 18 July, 2005 during Singh's visit to the US.³⁰ Both sides released the details of the agreement two years later in August 2007,³¹ and eventually signed it in October 2008.³² The deal allowed India greater access to Western nuclear technology for its nuclear industry, waivers from various non-proliferation cartels like Nuclear Suppliers Group (NSG), and IAEA safeguards on facilities declared 'civilian' on India's own discretion for imported nuclear fuel.

All this was allowed to India despite not being a party to the NPT, hence setting a bad precedent on indiscriminate global non-proliferation. These measures would allow India's domestic fissile material to increasingly focus towards its nuclear weapons. The agreement was hailed by the Indian strategic community as a means of further legitimizing India's quest for recognition as a nuclear state at par with the P5. However, many politicians, especially from the leftist parties in India criticized it as India's departure from its traditional non-aligned policy. Pakistan criticized the favoritism shown towards India and desired a similar agreement with US in order to address its own energy crisis, and ensure balance in global non-proliferation discourse. India gained a more favorable nuclear treatment from Japan and Australia as well but Indian domestic liability laws have slowed implementation on these agreements.

Indian Defence Expansion

India has increasingly expanded its defense spending for research, development, production, and procurements from abroad. Its military budget for fiscal year 2014-15 stands at US\$ 38.4 billion.³³ India's Defense Research and Development Organization (DRDO) has benefited from the budget hikes as it's the main player in India's Integrated Guided Missile Development Program (IGMDP). It develops India's ballistic missiles and has worked on Ballistic Missile Defense (BMD) shield. DRDO has pursued extensive testing of the *Agni* and *Prithvi* ballistic missiles, co-developed BrahMos supersonic cruise missile with Russia help and claims to be close to operationalizing its BMD shield.³⁴ The development of shorter range missiles like *Prahaar*, and submarine-launched ballistic missile *Sagarika*/ K-15 (for the *Arihant* nuclear submarines) shows India wants to have a nuclear arsenal with a second strike capability for both tactical and strategic use. DRDO's attempts to 'canisterise' its missiles to lower reaction times indicate that India is putting its missiles on a much higher alert status.³⁵ *Agni-V* is now stated to have a 5,000 km range to cover China, with DRDO boasting that it can even develop a 10,000 km range ICBM.³⁶

These developments, though aimed to counter China, further tilt the balance against Pakistan and risk an arms race in South Asia that neither state can withstand in the long terms.³⁷ Hans M. Kristensen however doubts that the Indian government has actually authorized design, development, and deployment of longer-range missiles with multiple warheads and quick-launch capability.

India regards China as its main strategic threat and Pakistan as an auxiliary threat that contains India from projecting its power outside South Asia. Pakistan's nuclear program is also considered by certain Indian scholars like Harsh V. Pant as an extension of China's nuclear programme.³⁸ As a result, India is said to have a differentiated strategic response to both sides; coercion or compulsion towards Pakistan, and a move away from 'defensive defense' to 'active defense' against China.³⁹ Zachery Keck argued that India's nuclear weapons have failed to achieve much of their stated goals as it intended to deter China's territorial ambitions but compelled Pakistan to go nuclear.⁴⁰

26/11, NASR, and Massive Retaliation

On 26 November 2008, Mumbai saw nearly 172 deaths after a coordinated attack by terrorists.⁴¹ The attack stunned India and agitated the public. Pakistan was blamed for it and demands for retribution came from politicians, and other public, and media. Similar demands were also made when Indian parliament was attacked by terrorists in 2001.⁴² The attacks heightened tensions over fears of Indian pre-emptive military operations against Pakistan. However, Pakistan arrested suspects on international pressure and admitted that the sole surviving gunman Ajmal Qasab was a Pakistani. Eventually negotiations succeeded in avoiding another conflict between the nuclear neighbors with steps taken to curb VNSAs. However, India still maintains that Pakistan has not done enough to prosecute Mumbai attack suspects.

When things had calmed down after 2008, another issue came up mudding the waters again. Pakistan's development of *Nasr* missile to counter Cold Start was labelled a tactical nuclear weapon (TNW). It attracted criticism from India who blamed Pakistan for lowering the nuclear threshold, and speculated that *Nasr's* command and control will be pre-delegated to battlefield commanders, vulnerable to accidental use or theft and local commanders may be faced with a "use it or lose it" dilemma.⁴³ India's National Security Advisory Board (NSAB) chairman Shyam Saran further complicated the matter when in an April 2013 speech he categorically stated that even a low-yield weapon used on Indian forces would invoke massive retaliation.⁴⁴ This attracted debate over credibility of 'massive retaliation' threat. Annihilating urban areas in response to a low-yield strike on invading Indian forces in a desert region raised issues of escalation making 1/5th of humanity suffer a nuclear holocaust. The on-going debate in Indian strategic circles is for a more 'flexible response' instead of massive retaliation.⁴⁵

Indian desire to 'punish' Pakistan's alleged collusion with terrorists, can lead to crisis escalation from sub-conventional to conventional and finally nuclear levels. This scenario was simulated in the "Strategic Stability Workshop: A Crisis Simulation Exercise" report by US Naval Postgraduate School in early 2013 in which retired Pakistani, Indian, and US officials took part.⁴⁶ Chari argues that India's commitment to No First Use has not caused Pakistan to shun any tactical use of nuclear weapons nor its apparent use of VNSAs to challenge India's security

and resolve.⁴⁷ He argued for adopting an ambiguous nuclear doctrine to keep Pakistan in check.

BJP's Return to Power and Amending DND

In May 2014, the BJP electoral victory ended Congress' 10-year rule in India and returned to power. The Hindu nationalist party, now led by the controversial, yet ambitious, Narendra Modi as the Prime Minister, is riding on a wave of renewed nationalistic sentiment and desire to see India further assert itself in world affairs. Its election manifesto promised a lot on socio-economic, political, and defense issues. However, it gained much attention over its 'Independent Strategic Nuclear Programme' section.⁴⁸ It declared that BJP will consider revising its nuclear doctrine to address the changing geopolitical realities of the region, whilst maintaining a credible minimum deterrence posture.

It was believed that India will discard NFU and adopt a more assertive nuclear posture with regards to its missile developments and increasing urgency to have a fully capable and ready strategic force.⁴⁹ However, Modi assured that the Vajpayee-era NFU shall not be changed as it was India's "cultural heritage."⁵⁰ Maintaining NFU can be perceived to be India's 'moral high ground' of a defensive nuclear weapons policy with respect to China and Pakistan. In fact, Manmohan Singh had played a 'moral' card of his own when, in the last days of Congress rule he proposed a global convention on 'no first use.'⁵¹

India's desire to combine a normative image with major power aspirations is an essential tool for its strategic elite to gain global recognition and acceptance. Interestingly, the main author of BJP manifesto's foreign and strategic policy sections was the veteran Jaswant Singh who is now no longer in the party.⁵² Modi has brought a new generation of strategists and ministers to utilize India's stronger, more respected, and more assertive standing in world affairs. One of the first indications of doctrinal change was when Modi's new National Security Adviser Ajit Doval spoke about India needing an 'effective and credible deterrence' against all threats.⁵³

This means India will continue expanding its nuclear arsenal and have a greater number of weapon systems in future in order to meet its major power ambitions and enhance its status as a regional power. Its recent focus on space technology

will see its strategic capabilities also incorporate space-based military systems like the Indian Regional Navigational Satellite System (IRNSS) to enhance its surveillance, reconnaissance, and targeting means. However, it is unlikely to bring more transparency on its nuclear policy and strategy. Maintaining an opaque stance only adds to speculation and suspicions of adversary states when deterrence requires more effective communication and signaling to ensure credibility.

Implications for Pakistan

Pakistan naturally views Indian ambitions as threatening to its national security and upsetting strategic balance in South Asia. Growing conventional and strategic capabilities mean India has more or less become the regional hegemon in South Asia, and expects its neighbors to bend to New Delhi's will rather than resist it. Lack of effective mechanisms for amicable resolutions of lingering bilateral disputes, pressures on its western borders, and an increasingly complex internal security situation means Pakistan is on the back foot when dealing with India and aspiring to be treated as a strategic equal in the region. Indian strategic thinking points to its desire to ensure that all disputes with its neighbors are resolved to protect India's own interests. India's tremendous size and growing clout in world affairs naturally impacts on Pak-India ties.

By stating its objective of striking a strategic balance with China with aggressive and ambitious conventional and nuclear capabilities, Pakistan is automatically put at a major disadvantage and consequently, South Asia remains in a state of strategic instability. Pakistan has been able to develop a robust nuclear command and control system with its own National Command Authority (NCA) chaired by the Prime Minister, and the Strategic Plans Division (SPD) as NCA's secretariat. SPD is responsible for all of Pakistan's nuclear developments and strategic forces. However, complete synergy of Pakistan's conventional and nuclear capabilities is necessary for responding to strategic threats it faces with its limited resources and internal security issues.

Growing Indo-US cooperation in security as well as technological spheres since the 2008 civil nuclear deal shows Washington now considers its ties with India to be far more important and in line with its Asia-Pacific pivot to counter China. While ties between US with Pakistan due to situation in Afghanistan have worsened. India's economic and military size, and enhanced strategic ties with Japan and

Australia, in the wake of offer of civil nuclear deal to Delhi is likely to cause a major shift in South Asian strategic environment that will put Pakistan in a precarious position. The US however, encourage Pak-India peace with emphasis on Pakistan to be more cooperative and conciliatory towards India. It shows US' interest to relieve India from local tensions and allow New Delhi to project its power to effectively contain China. This is a geostrategic reality Pakistan has to face.

For too long, Pakistan's foreign and security policies have been India-centric. Pakistan has been unable to develop its foreign options and objectives beyond the South Asian security competition. Its quest for assistance from West and Muslim countries has been mostly to keep India's ambitions in check. India's politico-diplomatic and economic clout dissuades other countries from whole heartedly supporting Pakistani point of view. Pakistan's nuclear capabilities have been able to deter India from military adventurism but it does not guarantee long-term progress. Unless there is a thorough strategic rethinking inside Pakistan, considering all other options and subdue internal turmoil, Islamabad will remain in a disadvantaged position.

Conclusion

India's nuclear policy is an extension of its well-entrenched strategic culture that has both historical roots and political motivations. It regards its nuclear capabilities as a source of pride and a guarantee of its security from strategic threats. By factoring China as its strategic threat, yet maintaining most of its forces as Pakistan-centric, India aims to expand and enhance its nuclear arsenal and utilize its growing global clout as a major power in the international system.

However, much of its nuclear policies remain confidential and the declared aspects of its policies do not give its neighbors like Pakistan the necessary confidence in keeping strategic stability in South Asia. Nuclear deterrence can only provide security against the use of nuclear weapons or a major conventional attack but not against violent non-state actors that threaten the securities of both India and Pakistan. Using non-state actor attacks as an excuse, India has focused on military build-up. Whatever steps India takes, Pakistan is forced to respond to the best of its rather limited abilities. Indian nuclear policy is expected to further change as a new government arrives in New Delhi after the 2014 elections, and its capabilities may also expand in kind.

Pakistan is being forced to play second fiddle in South Asia due to India being central to US policy in the Asia-Pacific, and will be forced to reconsider its options in order to safeguard its interests. Such changing geostrategic realities mean nuclear South Asia will continuously remain under flux pending conflict resolution and restraint.

Ali Ahsan is an MPhil (International Relations) scholar in National Defence University (NDU), Islamabad.

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