1 Introduction

India's nuclear behaviour has been a subject of intense academic interest and policy debates, especially in the Western world, since the time India undertook what it termed as a peaceful nuclear explosion (PNE) in May 1974. The PNE shook the fragile edifice of the nuclear non-proliferation regime[1] which was then beginning to consolidate. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) had just come into force at the beginning of that decade and had invoked the normative framework of an international regime that sought to control the spread of nuclear weapons, facilitate steps to free the world of nuclear weapons, while ensuring that nations reap the benefits of atomic energy. The PNE forced a scramble among the guardians[2] of the regime and sustained the fear that many more will follow suit, taking inspiration from India. The regime and its constituents had to be re-tailored to defeat this eventuality. In contrast to initial apprehensions and the many predictions of a widespread breakout of nuclear weapon aspirants, it was again India's turn to decisively shake the regime, 24 years later, through its series of nuclear tests in May 1998, this time not as a PNE, but definitively declaring to the world that it is a nation possessing nuclear weapons.

Nuclear theorists, and an emerging group of nuclear historians,[3] have been using the Indian case study to understand why nations pursue nuclear weapons. The propositions derived were not just supposed to explain the causals of proliferation, rather to also generate understanding on how nations approached the normative structures and processes of non-proliferation. Most of these studies are predominantly based on existing theories of proliferation and deterrence while another bunch of literature seeks to apply the Indian example to analyse the implications of new nuclear weapon states on regional

and global security dynamics.[4] A major section of studies on proliferation drivers outlines variables like pursuit of power and prestige, domestic impulses, as well as security dilemmas arising from strategic competition with nuclear rivals as among primary factors that propelled countries like India to pursue nuclear weapons.[5] Hardly few among them, though, have considered the influence of India's complicated, and often tumultuous, relationship with instruments of non-proliferation as having prompted periodic shifts in its nuclear policy, consequentially shaping its approach towards not just non-proliferation and disarmament, but also its decisions on nuclear weapons and nuclear energy development.

It is not difficult to comprehend the struggle that analysts and historians could have had in discerning the political underpinnings and the dynamics of India's nuclear decision making, especially in their multitude of efforts to precisely explain the PNE and the 1998 tests. The large gamut of primary sources and official records that could have otherwise provided for new insights and interpretations on India's nuclear policymaking history is largely inaccessible or yet to be declassified.[6] This is more the case for the 'sensitive' historical documents pertaining to the strategic programmes which are yet to reach public archives. However, many official articulations of India's policies and approaches to normative shifts in the regime are accessible in the public domain, thanks to the intense debates preceding crucial Indian decisions on non-proliferation and disarmament, and if not much less to India's emphatic posturing of its dogmatic positioning on global security issues. Ample evidence, hence, exists to substantiate the postulation that key Indian nuclear policy decisions could have emanated from the generally emphatic, often dramatic and sometimes radical Indian reactions to shifts in the normative and executive structures of the non-proliferation regime.

A retrospective analysis of the events running up to the 1974 PNE and the 1998 nuclear tests could indicate this trend. A dominant line of thinking puts forward the argument that Prime Minister Indira Gandhi sanctioned the PNE in the aftermath of the 1971 war with Pakistan, which revealed some stark strategic realities, mostly notably the polarization of some nuclear weapon states against India. The appearance of the USS *Enterprise* in the Bay of Bengal is said to have shaken the Indian leadership, and convinced it of the need to demonstrate a nuclear capability. Prominent personalities associated with the PNE like P.K. Iyengar have repeatedly testified to this aspect, though unable to correlate the circumstances with India's signing of the friendship treaty with the Soviet Union or explain why this treaty may not have provided the requisite level of confidence at that critical juncture. Such

narrative gaps notwithstanding, a largely undervalued explanation in most narratives on the PNE decision is the impact of India's rejection of the NPT some years earlier. Often overlooked in most assessments is the significance of Prime Minister Indira Gandhi's statement in the Lok Sabha that 'we shall be guided entirely by our self-enlightenment and the considerations of national security,' days after India decided to reject the NPT treaty text.[7] Besides the supposedly emotional outcry on a flawed bargain that created a world of nuclear 'haves' and 'have-nots', the Indian government was by then convinced that the NPT, by failing to enshrine disarmament obligations of the nuclear weapons states, will have little role in addressing India's concerns on the threat from nuclear China.

A handful of existing and recent research endeavours to capture the historicity of India's early nuclear debates and policies describe the high polemics over nuclear weapons that were initiated at various levels after the Chinese nuclear test in 1964.[8] Homi Bhabha's famous declaration of capability that India could produce nuclear weapons in 18 months;[9] the demands for nuclear testing from a cross section of parliamentarians, media and scientists; Bhabha's prospective elevation to the Indira Gandhi cabinet[10] — stand as testament on how a decision to test was always at arm's length throughout the 1960s. Prime Minister Lal Bahadur Shastri's purported sanction for the Subterranean Nuclear Explosion Programme (SNEP), as claimed by George Perkovich, abstracts this narrative, though nuclear scientists deny existence of SNEP, while no official document has emerged to confirm this.[11] Further, A.G. Noorani had analysed Shastri's attempt to acquire security guarantees during his London visit, which was interpreted as a desperate attempt to resist the pro-bomb clamour.[12]

That Vikram Sarabhai as chairman of the Atomic Energy Commission (AEC) had moderated the pressure building up from various quarters on nuclear testing, and that the political leadership could have waited with anticipatory hope for a satisfactory outcome from the NPT deliberations, could be conjoined with Indira Gandhi's 1968 statement to list the multitude of factors that could have delayed a decision to test. It is then improvident to believe that prestige and power aspirations weighed in the minds of Indian leaders. Rather, the disgruntlement over the normative settings provided by the NPT for a new framework of global non-proliferation, which India felt was discriminatory and could compound its security concerns, could have fuelled an indomitable determination among Indian leaders on the imperative of acquiring, and showcasing a nuclear weapon capability. A conclusive note on this postulation would be the decree by Indira Gandhi, as described by

Raja Ramana, in the final meeting to decide the PNE 'that the experiment should be carried out on schedule for the simple reason that India required such a demonstration.'[13]

Such a capability demonstration could then have had multiple intentions: showcasing to the world that India has the ability to develop nuclear weapons, notifying China on the need to be amply deterred, posturing to the non-proliferation community in physical terms India's dissatisfaction with the NPT bargain declaring that non-proliferation norms cannot desist India from meeting its 'considerations of national security', and probably even expressing a symbolic note of dissent against the manner in which India's objections were overlooked in the course of finalizing the treaty text. While not discounting the relative impact of the 1971 campaign, the dominant rationale of the PNE, as seen from these evidences, could be conclusively described as India's reaction to structural and normative shifts in the non-proliferation regime, which the political leadership felt carried no promise of addressing India's security concerns, if not affecting it detrimentally.

A similar reconstruction of events and decisional dynamics leading to the 1998 tests also does not illustrate a different picture. India's relationship with the regime, its cornerstone, key instruments, and invariably its guardians, were hardly impressive in the years preceding 1998. After the Rajiv Gandhi Action Plan — India's penultimate attempt in a long journey since the PNE to convince the nuclear world of how non-proliferation should be the decisive path towards disarmament — was cold-shouldered by the powers-be, India had apparently decided to weaponize, its major manifestation being the aborted testing attempt in 1995.[14] By then, the decision to indefinitely extend the NPT had convinced the Indian leadership that the system of 'nuclear apartheid' sustained by the treaty will persist for the infinitum. A last ditch attempt to force a disarmament roadmap on the nuclear weapons states, in a bid to address the Chinese nuclear challenge, failed after the final text of the Comprehensive Test Ban Treaty (CTBT) forced no such commitments from the P-5 to link test ban with a disarmament plan. A repeat of the 1974 scenario seemed imminent as India's objections on the CTBT final draft were rejected almost on the same lines as done with its NPT arguments.

This was also the period when India began to feel the intense heat from many of the post-1974 export control mechanisms, described by New Delhi as 'denial' regimes. The 1992 guidelines by the Nuclear Suppliers Group (NSG) that only countries with Full-Scope or Comprehensive Safeguards

Agreement (CSA) with the International Atomic Energy Agency (IAEA) will be allowed to access nuclear supplies, had virtually shut India out from international nuclear commerce, denying its access to crucial nuclear fuel supplies, as well as the know-how to expand into the advanced reactor domains.[15] That the NSG was formed as a supplier cartel in response to the 1974 PNE implictly characterized the 1992 guideline as another targeted affront. The scenario remained gloomy as other mechanisms in the regime like the Wassenaar Arrangement and the Australia Group tightened dual-use export provisions with designated targeting of non-NPT states like India, even as the Missile Technology Control Regime (MTCR) plugged all routes for any technological assistance to the then struggling Integrated Guided Missile Development Programme (IGMDP).

Though the Narasimha Rao-led Congress government was supposed to have taken the first steps towards an overt nuclearization process through a testing attempt in 1995, which was aborted following reported American intervention, it was the National Democratic Alliance (NDA), led by the Bharatiya Janata Party (BJP), that had bonded the elements of power, prestige and nationalistic pride to justify India's nuclear weaponization. As lead vortary of India's pro-bomb brigade,[16] the BJP had only needed to be in power and the right political context to sanction nuclear testing. Though BJP fulfilled its political calling by deciding to test, it may not be inappropriate to posit the counterfactual that had India's relations with the regime been conducive, or had the CTBT been to India's satisfaction, or had the NPT's indefinite extension (in which India did not have any say) come with incentives for India to join the Treaty, the strategic environment would not have had favoured India's nuclear testing decision. As mentioned earlier, the decisive impulse towards weaponizing could have been the rejection of the Rajiv Gandhi Action Plan (assuming Rajiv Gandhi had sanctioned weaponization) and the indefinite extension of the NPT. Thereby, notwithstanding the fact that the Congress party had questioned the logic and timing of the NDA government's decision to test in 1998, one could speculate that even a Congress government could have done the same by treating the CTBT debacle as the final nail in its eroding confidence in the non-proliferation system. The evidences and suppositions derived thereof thus make it necessary to assume that despite prevalent primary and secondary influences, India's nuclear decision-making process could be seen as customary as well as impulsive responses to the stimuli — namely the normative and paradigm shifts in the non-proliferation regime and its key instruments.

The puzzle and its broad context

India thus offers a unique case for study primarily in terms of a state's relationship and dynamics of interaction with the non-proliferation regime, especially on how a state functioning outside the dominant framework of a system reacts to its normative shifts, and then shapes its policies as response to periodic, and often tumultuous, transformations. The uniqueness of this regime–state interaction is buttressed by many factors and phenomena. Numerous conceptual intricacies exist in the manner in which the regime functions with static objectives but with constantly evolving norms and rules; how its membership is defined and described by its guardians as well as the community of analysts, non-governmental groups and opinion makers; and how the normative basis of the regime has been differentially treated by various actors within the regime. The relevance of the Indian example to this context is also about the marvel of seeing a country surviving as a nuclear-capable sovereign entity — a colossal nuclear energy producer and possessing nuclear weapons — all the while being termed as outlier in the system. Of related significance are the dialectics on the scope of integrating outliers into the regime, through normative and structural adjustments.

Such characteristics evoke many structural questions: can a state remain successfully as a nuclear-capable entity outside the near-universal normative framework of the non-proliferation regime? How can the right of a nation to indigenously develop its resources for nuclear energy and weapons outside the regime's framework be challenged, if it is capable of doing so on its own merits and strengths? Should a nation be outcasted if it differs with the dominant normative structures and prefers to survive on free will? What is the criterion to define the regime's membership, so as to authoritatively describe a nation as an outlier? Is the outlier description of India oxymoronic especially when India has been a member of various instruments preceding the NPT, like the IAEA safeguards system, and many global institutions connected to the regime including the Conference on Disarmament (CD)? Finally, does not the regime, as a loose or abstract construction of norms, rules and structures, give ample space for a nation to function with rights of selective adherence?

These questions need a detailed inquiry, which will be undertaken in later chapters, but not before qualifying some facts and suppositions on India's approach to non-proliferation, its relationship with the regime, as well as the conceptual evolution of the non-proliferation paradigm and how it influenced the regime's normative structures.

First is the significance of the multitude of roles India has played in shaping the non-proliferation discourse and the regime's construction, an element

often underplayed or overlooked in the non-proliferation and disarmament narratives of Western literature. India, for that matter, has been an active participant in the initial process leading to the formation of the regime. As a recipient state of international civil nuclear energy cooperation, heralded by the 'Atoms for Peace' plan, India played a role in the early organization of the IAEA, and has since been a prominent member in its governance[17]. Thereby, India's commitment to nuclear safeguards (a verification and monitoring system to ensure that civilian nuclear resources are not diverted to a weapons programme) enabled it to subscribe to a suitable safeguards system — IAEA's Information Circular (INFCIRC)-66 type safeguards which entailed facility- or item-specific safeguards over Indian civilian nuclear facilities, especially those functioning with foreign supplied fuel or technology.[18] India though consistently resisted calls to adhere to full scope safeguards as it could have been listed among non-nuclear weapon states (NNWS), as defined by the NPT. It had seen this categorization as part of the discriminatory bargain that caused a seemingly infinite condition of nuclear 'haves' and 'have-nots'. Instead, India argued for the Treaty to facilitate a world where there will no more nuclear weapons, and as a consequence, no nuclear weapon states.

Another widely underplayed role that India undertook was of propagating the very idea of non-proliferation at the Eighteen Nation Disarmament Committee (ENDC), formed to formulate the NPT text.[19] The dominant theme during the initial deliberations was of 'non-dissemination' that emphasised the need to control and stop the dissemination of nuclear technology. By invoking the concept of 'non-proliferation', India attempted to draw equal importance to both vertical and horizontal proliferation, though the NPT ended up sanctioning the sustenance of vertical proliferation. While backing the initiative to create a treaty on non-proliferation, India espoused the belief that the treaty will lead to a post-proliferation world, from where the process of complete elimination could be initiated, while promoting and enabling uninterrupted access to nuclear energy resources.

Secondly, India's policy on non-proliferation and disarmament has often been termed as inconsistent, wavering and ad hoc.[20] This state of affairs, however, began after India's 1974 PNE, and further aggravated after the 1998 tests. Prior to 1974, India had a well-defined vision of global security and stability, and the imperative of nuclear disarmament in facilitating these goals. Beginning with Jawaharlal Nehru's campaign for ending atmospheric testing that culminated in the Partial Test Ban Treaty (PTBT), India's initial campaign running up to the NPT's formulation included initiatives like nuclear test ban and ending fissile materials production, both of which

India ironically ended up resisting decades later. The early years of India's activism based on Nehruvian principles had also constantly clashed with the domestic demands for nuclear weapons development, in the light of China's 1964 testing. As described earlier in this chapter, the period between 1964 and 1970, could be construed as one of wasted opportunities, when India could have decisively taken a decision to test and could have consequentially joined the ranks of nuclear weapon states as defined by the NPT and its 1968 cut-off.

While it could be argued that India's confrontation with the non-proliferation regime and its functional norms began from the time it rejected the NPT text, it has to be emphasized that many other non-nuclear weapon states were equally disappointed with the final treaty text, but preferred to go along with the belief that not having a treaty was detrimental to global security than having an imperfect one. India though preferred not just to stay out, but also challenge the Treaty's principles by demonstrating its capability to develop a nuclear explosive device, though with an incomprehensible refrain of terming it not as a weapon test, but as a PNE.[21] Explaning India's relationship with the regime thus entails a historical narrative of the post-PNE era. The period between 1974 and 1998 was marked by adhocism and policy ambivalence when India profoundly resisted the temptation (and domestic demand) to weaponize, despite looming security threats in its neighbourhood, while campaigning for initiatives like nuclear freeze, delegitimization of nuclear weapons and a roadmap to complete disarmament, as elucidated by the Rajiv Gandhi Action Plan.

The 1998 tests established India's emergence as a *de facto* nuclear weapon power, but only compounded the complexities of its non-proliferation and disarmament policies. Initiatives like CTBT and FMCT had to be resisted not because of the hitherto-highlighted concerns on disarmament, rather owing to the fact that these mechanisms will be inimical to the unhindered progress of its own nuclear weapons programme. On disarmament, India holds on to the argument that the recognized nuclear weapon states should initiate the process, to which India could later join when convinced of its credibility, legitimacy and universality. At the same time, India propagates a Nuclear Weapons Convention as the ideal route to disarmament, though this idea has very few takers. In the same breath, India continues to treat the NPT as discriminatory, though marking a remarkable shift through a post-1998 posture by declaring its in-principle adherence to the Treaty's key provisions but also asserting that it should be treated on par with nuclear weapon states, i.e., endowed with the same rights (and obligations) or rather implying an accession opportunity as a nuclear weapon state.

Owing to such postural inconsistency and policy incongruence, India is unable to define its own role and status in the non-proliferation regime, even as it steps up its dialogue with pivotal mechanisms of the regime, especially the export control sub-regimes. In other words, India wants to be treated as a key player in the regime, positioned among the guardians at its high tables, but prefers to be parsimonious on a campaign to fulfil this objective. One reason for this ambivalence is the fact that not many in India's policy establishment are concerned about India's status in the regime, as they feel the NSG waiver and new safeguards agreement with IAEA gives it sufficient space to interact with key components of the regime without having to fulfil the normative requirements of a formal membership in its cornerstone treaty. For that matter, the lack of clear understanding on what amounts to a formal membership in the regime favours this policy.

The much-debated process of India's integration with the non-proliferation regime thereby underlines the state of epistemological and conceptual confusion within the regime. To some, India is part of the regime and only needs greater assimilation with those structures that it had hitherto resisted. To another dominant group, India's integration could be deemed as complete only when it joins the NPT, preferably as a non-nuclear weapon state. On the other hand, the process initiated for this integration — the India-US Joint Statement of 18 July 2005 (also termed as the Indo-US nuclear deal) — is explained by prominent analysts as an attempt to bring India back into the non-proliferation mainstream, or in other words ending India's nearly three and a half decades of isolation from the non-proliferation and supplier communities.[22] Such analyses, though, have not generated any conceptual investigations on India's status in the regime or theoretical and structural explanations on the dynamics and period of its isolation, and rather have largely been narratives on the challenges that India faced on the non-proliferation front and the regime's many structures.

This opacity of concepts and lack of their proper articulation and understanding have caused doctrinal incongruence and policy ambivalence, most notably in determining India's participation in the so-called new-order mechanisms like the US-led counterproliferation initiatives. The role of these initiatives in the non-proliferation regime, and their compatibility with the concept of non-proliferation are inconclusively or rather insufficiently debated. This has consequently led to indecision and ambiguity on a key commitment that India made in the 18 July 2005 Joint Statement — plays a major role in global non-proliferation efforts. While many point to this role as India's participation in the export-control mechanisms and

other important mechanisms of the regime sans the NPT, various other interpretations, especially from the US, point to an active role envisaged for India in programmes like the Proliferation Security Initiative (PSI), nuclear security measures and other new-order mechanisms in order to fulfil this commitment. Some others stretch this interpretation further to include India's commitment to FMCT, CTBT as well as supporting non-proliferation actions against violators like Iran and North Korea, among others. To make it worse, not many in India's policy establishment or the strategic community are clear about what India's active role in global anti-proliferation[23] could be, while dealing with the measures and pressures of integrating or assimilating with the non-proliferation regime.

This debate takes place in the backdrop of the widely prevalent formulation that the non-proliferation regime is in crisis, or is still struggling to consolidate amid the torrent of new and unrelenting challenges. The purported crises are attributed to the increasing instances of violations and non-compliance in the NPT system, which, as the cornerstone of the regime had perceivably passed on these tractions to the regime's edifice. However, most analyses on the NPT's problems attribute it to the Treaty's inability to reform itself to address the emerging threats and strategic realities, especially the emergence of non-state actors, which the state-centric Treaty was not tailored to address.[24] The regime, however, is seen to have undertaken a systemic restructuring, thanks to the selective measures initiated by its guardians to meet the new imperatives. The purported efforts to integrate India into the non-proliferation mainstream through the NSG waiver, the counterproliferation measures to punitively deal with cases of non-compliance and prevent violations, the nuclear security initiatives to deal with the threat from non-state actors — are all seen as among these broad measures initiated by its guardians within the regime to address the crises.

However, even this process of redemption has been fraught with structural incompatibilities and dogmatic contentions, which could be traced to the conceptual frictions marking the turbulence in the non-proliferation regime. For, the very objectives of the regime have come into question, as the goals of disarmament and uninterrupted access to nuclear energy resources have been impeded by the overemphasis on non-proliferation and by other exclusive and unilateral measures to strengthen the regime. Besides concerns on the unilateral character of counterproliferation and its doctrinal dissonance with non-proliferation, initiatives to control the fuel-cycle processes and efforts to curb Enrichment and Reprocessing (ENR) technologies are seen as incompatible with the orginially envisioned objectives of the regime.