Counterforce Temptations in South Asia

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Abstract

India’s ‘No First Use’ (NFU) commitment enunciated in its 2003 nuclear doctrine was not ‘unconditional,’ and retains the option of retaliation with nuclear weapons in response to a non-nuclear attack. The recent statements by India’s senior leadership questioning the rationale of maintaining an NFU posture has led many international observers to conclude that India may have formally given up its NFU posture and could be contemplating the option of pre-emptive counterforce strikes against its principal adversary, Pakistan. The doctrinal ambiguities together with the ongoing Indian military modernization, which includes the acquisition of Ballistic Missile Defence (BMD) system; operationalization of second-strike capability and the recent testing of a Hypersonic Technology Demonstrator Vehicle (HSTDV) has further reinforced the perception that India could be developing nuclear as well as conventional counterforce options to deter and prevent Pakistan from the early deployment or use of short range ballistic missiles (SRBMs), and create space for India’s limited war fighting doctrines of Cold Start or Pro-Active Operations (PAOs). These developments are likely to push the region towards

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another cycle of ‘instability-stability pendulum’ with serious consequences for regional as well as global stability.

Keywords: Counterforce, SRBMs, Hypersonic weapons, BMD systems, ASAT weapons, Strategic stability

Introduction

India with its military spending of over US $70 billion enjoys significant quantitative and qualitative edge over Pakistan but has not been able to fully exploit this advantage. The overt nuclearization of South Asia in 1998, further compounded India’s dilemma as it precluded the possibility of a war between the two nuclear armed adversaries. The two major military crises of 1999 and 2001-02 that took place immediately after both countries had formally declared themselves nuclear weapon states, that led to a stalemate, further reinforced the Cold War lesson that nuclear armed states generally do not go to war with each other. This realization helped start a Composite Dialogue process in 2004 with both countries agreeing in their joint statement that the “nuclear capabilities of each other constitute a factor of stability.”

Interestingly, while this political consensus was being developed at the leadership level, the Indian military introduced a new war fighting doctrine that could help provide an option of

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engaging in a limited conventional war without the risk of crossing Pakistan’s ‘perceived’ nuclear threshold.\(^5\)
The Cold Start Doctrine (CSD) or its subsequent version known as the Pro-Active Operations (PAOs)\(^6\) strategy posited a credibility dilemma for Pakistan’s nuclear deterrence. Responding with countervalue weapons against limited military incursions could have been perceived as disproportionate, and hence not credible; and not responding at all would have discredited Pakistan’s nuclear deterrence. In response to these new challenges, Pakistan introduced its short-range ballistic missiles (SRBMs)\(^7\) – also called the Tactical Nuclear Weapons (TNWs), as part of what is now known as Full Spectrum Deterrence (FSD) posture.

The FSD was conceived as a qualitative response and not a quantitative shift from Pakistan’s declared policy of Credible Minimum Deterrence (CMD).\(^8\) Over the past few years, however, the FSD seems to have undergone transformation and now includes a commitment to develop a credible triad of land, air and sea-based nuclear forces which could deter “large scale aggression against mainland Pakistan,”\(^9\) besides preventing a limited war with India.

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\(^6\) Ibid.


India’s Counterforce Temptations

India is building conventional as well as nuclear capabilities apparently to counter China, but this would also afford India the opportunity to develop a more aggressive posture towards its relatively smaller neighbours, especially Pakistan that remains a major security challenge and India’s principal adversary. The recent controversy surrounding India’s NFU commitment along with the ongoing military developments that include: the acquisition of ballistic missile defence system, operationalization of a second-strike capability,10 and testing of hypersonic weapons are being viewed as an effort to develop an option for a pre-emptive counterforce strike against Pakistan.

These capabilities, in theory, could also affect India-China dyad, but China enjoys significant conventional and nuclear advantage thus making it unrealistic for India to contemplate a pre-emptive counterforce strike against a superior military power. India’s counterforce temptations, therefore, are more focused towards its relatively smaller neighbour that refuses to accept India’s hegemony in the region.

From an NFU to a ‘First Strike’

India’s 2003 nuclear doctrine stated that India will maintain a posture of No First Use and “NWs will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere.”11 This commitment was with a caveat that in case of a


use of biological or chemical weapons, “India will retain the option of retaliating with nuclear weapons.”\(^{12}\) This effectively neutralized India’s NFU commitment, but officially India continues to assert that it will not be the first to use nuclear weapons.

Over the past few years, several senior members of India’s Nuclear Command Authority have openly voiced concerns about their country’s NFU stance terming it as counterproductive in the face of ongoing developments. Amongst the prominent dissenting voices including India’s former Strategic Forces Commander-in-Chief Lt. Gen. B S Nagal, former Defence Minister Manohar Parrikar, and the incumbent Defence Minister Rajnath Singh.\(^{13}\) India’s former member of the National Security Advisory Board (NSAB), Shiv Shankar Menon, in his 2016 book wrote that India could possibly contemplate a counterforce first strike even if it is threatened with the use of nuclear weapons, and not necessarily their actual use. According to Menon:

> There is a potential gray area as to when India would use nuclear weapons first against another NWS. Circumstances are conceivable in which India might find it useful to strike first, for instance, against a NWS that had declared it would certainly use its weapons, and if India were certain that adversary’s launch was imminent.\(^{14}\)

The threat of ‘first’ use of nuclear weapons is mainly targeted towards Pakistan and not China, as the latter has given

\(^{12}\) Ibid.


unconditional NFU commitment and enjoys significant military advantage, and has no incentive to engage in a major conventional or a nuclear war with India. There is also a likelihood that India may have developed two different sets of nuclear doctrines to cater for two asymmetric dyads, i.e. India-China and India-Pakistan. This could allow India the option of a ‘First Strike’ against Pakistan while maintaining an NFU posture against China. This de-hyphenation could lead to serious operational difficulties as no nuclear armed country can afford to maintain two different nuclear postures, and India is no exception. The threat of a nuclear ‘First Use’ or a ‘First Strike’ against Pakistan, therefore, seems to be an effort to deter Pakistan from the early use of its nuclear weapons while allowing India’s conventional military to engage in a limited war with Pakistan.

**BMD System and India’s False Sense of Security**

India is developing a multi-layered ballistic missile defence (BMD) system to intercept incoming missiles from Pakistan. It has recently acquired the S-400 air defence system from Russia that would enable it to engage the incoming aircraft, drones, ballistic and cruise missiles at a range of 400 km.\(^\text{15}\) In addition, India has also developed its indigenous two-layered missile defence system comprising Prithvi Air Defence (PAD) system\(^\text{16}\) and the Advanced Air Defences\(^\text{17}\) to intercept ballistic missiles in mid-course and in terminal phase.\(^\text{18}\)

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\(^\text{15}\) “Russia to deliver S-400 by 2021-end, but will supply missiles and bombs amid LAC tensions,” *The Print*, July 1, 202.

\(^\text{16}\) “India’s ballistic missile shield ready, IAF and DRDO to seek govt nod to protect New Delhi,” *The Print*, January 8, 2020.

\(^\text{17}\) Ibid.

The BMD system that India is in the process of deployment in the first phase will cover only Delhi but may be extended to protect other cities from Pakistan’s ballistic missiles. However, due to short flight time of the missiles between the two countries, it would be extremely difficult to guarantee that India’s BMD system would successfully intercept all incoming missiles from the Pakistani side, as there is no fool proof missile defence shield that could guarantee protection from all incoming ballistic missiles. Moreover, Pakistan has also developed Multiple Independently Targetable Re-entry Vehicles (MIRVs)\textsuperscript{19} that can carry multiple warheads and deceive tracking radars and the missile defence system that could render India’s BMD system as ineffective. The US, which is leading in the BMD technology, has spent more than 30 years and US $ 500 billion and has yet to perfect a credible and effective missile defence system.\textsuperscript{20} India is likely to take several years and more resources to perfect a credible missile defence shield that could provide some degree of assurance against incoming missiles.

Notwithstanding the presumed efficacy of India’s BMD system, its acquisition could raise the temptation “to attempt for a splendid first strike based on the assumption that BMD interceptors can successfully intercept any leftover offensive missiles the adversary could then fire in retaliation.”\textsuperscript{21} This ‘false sense of security’ amongst India’s senior leadership could provide inducement for a pre-emptive ‘First Strike’ or a ‘Counterforce Strike’ against Pakistan’s nuclear arsenal, especially the SRBMs that have played a pivotal role in deterring India from operationalizing its limited war doctrine during the past several crises.

\textsuperscript{19} Inter Services Press Release (ISPR), No. PR-34/ 2017-ISPR. Jan 24, 2017.
\textsuperscript{20} Ibid.
\textsuperscript{21} Ibid.
India’s Second-strike Capability

The acquisition of a credible second-strike capability by one of the two adversaries is likely to create instability as it could provide incentives to the possessor for a pre-emptive first strike. However, if both adversaries possess a credible second-strike capability to inflict unacceptable damage to each other, it enhances deterrence stability.

India is in the process of operationalizing its Arihant nuclear submarine which is viewed with concern by the Pakistani military planners as it disturbs the delicate balance of power between the two South Asian adversaries. These concerns are not without merit keeping in view the statements made by India’s senior leadership about the possibility of a pre-emptive first strike, which seems to deter Pakistan from the early use of its SRBMs and pave way for India to launch conventional military operations as part of its CSD/PAOs strategy.

India’s nuclear submarine programme began in 1996 before it formally declared itself a nuclear weapon state. The desire to acquire nuclear powered submarines had more to do with prestige considerations than a security threat from any of its regional adversaries. India leased (1988-1991), from the Soviet Union, the K-43 nuclear-powered cruise missile submarine, NATO code name Charlie I-class. Based on the Charlie class SSN, India started its Advance Technology Vessel (ATV) programme that eventually led to the development of the Arihant ballistic missile submarine (SSBN). The Arihant is capable of carrying strategic weapons with ranges between 750-1000 km which do not cover major Pakistani cities in the central part of the country and definitely cannot reach mainland China.

The Arihant SSBN completed its first deterrent patrol in November 2018 with PM Narendra Modi proudly claiming
completion of India’s nuclear triad.\textsuperscript{22} The statement had more to do with Modi’s nationalist agenda and to project India as a technologically advanced country rather than India’s security considerations. Ideally, a credible second-strike capability should be able to absorb and survive the adversary's first strike and retaliate to inflict unacceptable damage to the adversary. This would require Continuous at Sea Deterrent (CASD) patrols and at least 3-4 operational submarines capable of carrying intercontinental ballistic missiles (ICBMs). Unless India achieves this potential, it cannot claim to be in possession of a credible second-strike capability. India, nevertheless, is on a path to developing longer range missiles of 3,500 km that could hit mainland China, but a credible second-strike capability would entail having a fleet of 8-12 SSBN and SSNs, which according to a former Indian Navy Chief, may take at least 50-60 years.\textsuperscript{23}

India’s existing sea-based potential may not constitute a classic second-strike capability, but is likely to cause anxiety amongst its adversaries, especially Pakistan as it could encourage India to launch a first strike or a counterforce strike against Pakistan’s nuclear inventory. This offensive posturing could be intended at creating space for India’s conventional military operations and prevent Pakistan from responding with strategic weapons against India’s major cities but is also inherently risky as it could lead to uncontrolled escalation.

India is in the process of developing a command and control system for its second-strike capability. Institutional friction due to involvement of several stakeholders in India’s nuclear command and control chain increases the potential of an unauthorized use or...

\textsuperscript{22} “INS Arihant completes India’s nuclear triad, PM Modi felicitates crew,” \textit{Economic Times}, November 6, 2018.

offensive posturing that can lead to unintended signalling. Deployment of *Arihant* during the February 2019 crisis is one recent example where the nuclear submarine was deployed probably without the authorization of the political leadership and intercepted by the Pakistan Navy.  

From a Pakistani perspective, India-Pakistan nuclear competition could be avoided if India’s second-strike capability is only aimed at deterring its adversaries and will not be used for a pre-emptive strike. Failure to do so will only heighten the ongoing nuclear competition between the two South Asian adversaries with a potential for miscalculation during a crisis.

**Hypersonic Weapons and Counterforce Temptations**

India tested an indigenously developed Hypersonic Technology Demonstrator Vehicle (HSTDV) and has become the fourth country in the world having acquired this new and complex technology.  
The HSTDV is likely to be used for launching hypersonic cruise missiles that India’s Defence Research and Development Organization (DRDO) claims would be ready in another 4-5 years.

Hypersonic weapons, due to their speed, precision and manoeuvrability are believed to be more suited to target mobile ground-based missiles such as the ‘Nasr’ SRBMs of Pakistan, which have ‘shoot and scoot’ capability and can be moved at a relatively short warning time. India’s hypersonic weapons are likely to carry

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26 “India can have complete hypersonic cruise missile system in 4-5 years: DRDO,” *The Economic Times*, October 14, 2020.
conventional warheads,\textsuperscript{27} which from the Indian perspective, once employed against Pakistan’s SRBMs, would make it difficult for Pakistan to retaliate with nuclear weapons thus affording Indian military the option of engaging in a limited war with Pakistan as part of its CSD/ PAOs strategy.

Hypersonic weapons fly at speeds in excess of 6 to 7 times the speed of sound (300 + meters per second),\textsuperscript{28} and could take a fraction of time as compared to subsonic cruise missiles that are in India’s inventory. The speed, precision and manoeuvrability characteristics of hypersonic missiles are likely to cause significant shock and awe impact thus compressing the adversary’s OODA (Observe, Orient, Decide and Act) cycle which could lead to incorrect interpretation and result into early use of nuclear weapons to prevent ‘lose it or use it’ dilemma. The threat of a pre-emptive or a counterforce strike would also push the target country to take steps that may include putting its missiles on a higher alert level of launch on warning or launch under attack; increasing the mobility and numbers, besides other measures that may adversely affect crisis and strategic stability.

\textit{Ideology as a Driver for India’s Doctrinal Shift}

In 2014, India’s right wing Hindu nationalist party BJP in its election manifesto promised to ‘revise and update’ India’s nuclear doctrine to “make it relevant to challenges of current time.”\textsuperscript{29} This commitment led to a widespread speculation that India might give up its NFU pledge and adopt a more aggressive posture to deal with its Pakistan “challenge”. After coming into power, the BJP


\textsuperscript{28} “India can have complete hypersonic cruise missile system in 4-5 years: DRDO,” \textit{The Economic Times}, October 14, 2020.

leadership denied any such change, but statements made by India’s senior leadership left sufficient ambiguity about India’s nuclear use doctrine in a future military crisis with Pakistan.

The initial desire to shift from a NFU posture may have been driven by security imperatives and the need to create usable military options against Pakistan; however, the recent rise in ‘militant nationalism’ under PM Modi seems to have given new impetus to the ongoing debate amongst India’s strategic elite. Many hardliners amongst India’s political and military leadership are pushing for the revision of NFU stance, especially against Pakistan, which is seen as a major hurdle impeding India’s rise as a Hindu nationalist state.

The anti-Pakistan rhetoric witnessed during the February 2019 military crisis when PM Modi threatened Pakistan with “Qatal Ki Raat” (the night of massacre) and ordered mobilization of missiles was the most recent example of ideologically driven nuclear brinkmanship against another country. The excessive use of religious card by PM Modi against Pakistan may have pushed the BJP leadership towards a commitment trap, and there is a likelihood that in a future crisis India’s senior leadership may not be able to bear the burden of their own anti-Pakistan rhetoric and is forced to take the extreme step of launching a counterforce strike against Pakistan.

Possible Options for Pakistan

Pakistan views India’s nuclear modernization efforts as part of the strategy to shift strategic equilibrium in its own favour thus forcing it to develop responses that could help restore the balance without engaging in a costly arms competition with its neighbour. In response to these ongoing technological and doctrinal developments within India, Pakistan could possibly consider developing a ‘tit for tat’ response and build its own version of
hypersonic weapons. It could also review its FSD; enhance the mobility of its SRBMs; build own ASAT capability to disrupt and deny the requisite information to the adversary for launching a counterforce strike; and build a credible second-strike capability that could reduce the incentive for the adversary to contemplate a first strike against Pakistan’s nuclear arsenal.

**Can a ’Tit for Tat’ Capability Prevent Counterforce Temptations?**

The use of ‘conventional’ hypersonic weapons by India could bring pressure onto the Pakistani side for retaliating with nuclear weapons mainly to avoid ‘use it - lose it dilemma’, since not responding at all could discredit Pakistan’s nuclear deterrence. Pakistan could possibly consider developing its own hypersonic weapons with conventional warheads to provide a proportional response. This, nevertheless, could encourage India to test Pakistan’s resolve and engage in a limited war fighting doctrine without risking nuclear retribution from the other side. Developing a ‘tit for tat’ response, therefore, could push Pakistan towards a costly arms race with no meaningful outcome.

**Reviewing the FSD Posture**

Pakistan’s FSD posture was meant to deter the entire spectrum of ‘threats’ ranging between limited military conflict to an all-out war. Over the past decade FSD seems to have undergone some transformation and now includes the commitment to develop the entire spectrum of ‘capabilities.’ Speaking at the IISS in London, the former head of Pakistan’s Strategic Plans Division (SPD) defined the FSD concept as comprising “a large variety of strategic, operational and tactical nuclear weapons, on land, air and sea, which are designed to comprehensively deter large scale aggression against mainland Pakistan.”

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large scale aggression, if the FSD also intends to cover the entire spectrum of threats then it must also have options that could deny India the incentive to launch a conventional or a nuclear first strike against Pakistan’s nuclear arsenal.

In response to the threat of a pre-emptive strike, Pakistan could possibly consider the option of a disproportionate punitive response, which could include the possibility of nuclear retaliation even against a conventional counterforce strike using hypersonic delivery systems against Pakistan’s nuclear arsenal. This may appear stretching the limits of nuclear deterrence with a greater risk of deterrence breakdown but is likely to provide protection against India’s counterforce temptations.

**Increasing the Number and Mobility of SRBMs**

Hypersonic weapons fly at very high speed and can target missile batteries in a relatively short time and with precision given real time accurate targeting data. In a future India-Pakistan crisis, if Pakistan decided to deploy its SRBMs very early in the crisis, these may become vulnerable to India’s counterforce conventional or nuclear strike. On the other hand, reluctance to use SRBMs may open a space for India’s conventional military operations. To address this dilemma, Pakistan could work to increase the inventory and enhance mobility of its SRBMs with an adequate mix of conventional as well as nuclear warheads so as to reduce the incentive for India to launch a pre-emptive counterforce strike.

**Developing an ASAT Capability**

For hypersonic weapons to work most efficiently and reach their intended targets, they would need accurate information and coordinates through satellites. India has an extensive network of satellites and has also signed bilateral agreements with the US that would help it to gain access to sensitive information about India’s adversaries, including Pakistan. To deny access to real time
information about own assets, one of the possibilities could be to neutralize the adversary’s satellites through kinetic or non-kinetic means. This nevertheless would require access to new technologies and resources to build anti-satellite (ASAT) weapons. In South Asia, India has already achieved this technological advantage and Pakistan is yet to embark on the journey. It could take several years before Pakistan could credibly threaten India’s space-based assets that are being used for offensive military purposes.

**Building a Credible Second-strike Capability**

If one of the two adversaries have acquired a second-strike capability, it may provide incentives for a pre-emptive counterforce strike against the other and is therefore considered as destabilizing. However, if both adversaries have a credible second-strike capability and the capacity to inflict unacceptable damage to the other side after having absorbed the first strike, it would reduce pre-emptive counterforce temptations and thus enhance stability. To deny India the incentive for a pre-emptive counterforce strike, Pakistan must consider building its own version of a second-strike capability. This nevertheless would take considerable time and resources during which Pakistan may have to consider alternative options to deny its adversary the incentives for a pre-emptive first strike.

**Conclusion**

India’s counterforce temptations are guided by the political, military, technological and ideological imperatives. The desire by India’s political leadership to assert its nationalist credentials for domestic politics, and also to project India as a credible power externally, is pushing India to adopt aggressive military postures against its neighbours, especially Pakistan. Frustrated by the lack of credible military options against Pakistan’s nuclear deterrent, the
Indian military is contemplating options that could ‘arguably’ help create space for its limited war fighting doctrine.

India’s scientific community, mainly the Defence Research and Development Organization (DRDO), is working on a completely different trajectory and is building new systems that do not necessarily support India’s existing nuclear doctrine of ‘NFU’ but could provide the option of carrying out a pre-emptive counterforce strike against Pakistan. All these factors combined together with the current wave of Hindu nationalism enhances the prospects of India becoming more aggressive in its military posturing towards its neighbours, especially Pakistan.

In response to these developments, Pakistan could consider options to maintain credibility of its deterrence posture and achieve the primary objective of preventing a major war with India. This action-reaction cycle, which is a South Asian characteristic, is likely to exacerbate regional arms competition with increased possibility of miscalculation between the two nuclear armed adversaries in a future military crisis.

Both India and Pakistan have experienced a number of crises in the post nuclearization period and have learnt an important lesson that nuclear armed states cannot afford to engage in a major war. India’s persistent efforts to build options that could allow a limited war with its nuclear armed adversary and shift the balance of power in its favour could lead to miscalculation and trigger an uncontrollable escalation to major or all-out war with catastrophic consequences for regional as well as global security.

It is therefore imperative that both India and Pakistan, despite current differences over Kashmir, work to find the modalities to resume their stalled composite dialogue process that was based on a common understanding that stable nuclear deterrence contributes to peace and stability in the region, and that there is no
space for any conventional war, however “limited”, between the two nuclear armed adversaries in South Asia.