

# **Deterrence Stability Factors in South Asia: Technology, Doctrine and Escalation Thresholds**

**By**

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## **Introduction**

Strategic cooperation rests on the pursuit of common goals of high policy importance. Joint pursuit of those goals by two states normally gives rise to mutual confidence and a consciousness of alliance in that context. Pakistan and the United States have enjoyed such a relationship in the past, particularly against Soviet expansion during the Cold War. Efforts to revitalize such a relationship to combat global terrorism after September 11, 2001 and to build a foundation for stability in Afghanistan were partly successful at the outset and beyond for about five years. But mutual confidence in shared goals on an “end game” for the war in Afghanistan and on counter-terrorism as a basis for a lasting partnership on regional security has been unraveling in U.S.-Pakistani relations since 2007. Moreover, the rate of deterioration accelerated drastically in 2010-11. Mistrust has given way to distrust and the security relationship today apparently hangs together by tenuous transactional shreds. After the unilateral U.S. discovery and take-down of Osama bin Laden in Abbottabad on May 2, 2011, American officials stopped using the term “strategic cooperation” while Pakistan severed routine intelligence cooperation. Pakistanis at all levels, meanwhile, had long since disclaimed shared ownership in “America’s war on terror.”

It is not the purpose of this paper to diagnose the causes of deterioration in U.S.-Pakistan relations other than to observe that political turbulence in Pakistan and conflicting interests have overtaken those that were presumed to be shared in October 2001. Pakistani officials evidently believe they have a wider range of immediate national security interests as well as their own regional stakes, and a sense of urgency about them, that cannot be readily harnessed within or satisfied by the U.S./NATO AFPAK strategy as it currently stands. Neither is it the purpose of this paper to discuss how U.S.-Pakistani convergence in that AFPAK domain may yet be achieved. Other papers in the dialogue address that subject.

Rather, this paper focuses on factors and trends that affect the stability of the nuclear and security relationships between India and Pakistan where hot conflict, even nuclear war, could erupt with potentially catastrophic consequences locally, but that are also of great concern to the United States and the international community. The deeply troubled state of U.S.-Pakistani relations is

germane, however, to whether and how well the U.S. can play a proactive role in crisis management or conflict resolution between Pakistan and India and thus reduce the risks of nuclear war in South Asia. Moreover, it is important to bear in mind that the problems of insurgency in Afghanistan and of extremism within Pakistan also deeply affect security perceptions, objectives, and calculations of both India and Pakistan vis-à-vis each other.

## **Nuclear Deterrence**

India and Pakistan have been military and political rivals since partition, going to war twice over Kashmir in 1948 and 1965, and a third time in 1971 over the Bengali uprising in Pakistan's eastern province, which led to the creation of Bangladesh. Each past war was conventional and limited in intensity and duration, and was preceded or accompanied in some manner by subconventional operations. Each took place before nuclear weapons arrived in the subcontinent, though Pakistan's dismemberment in 1971 was a key catalyst for its nuclear weapons program. A fourth brief but intense, local, ground war was waged at Kargil on the dividing line in Kashmir in the summer of 1999, a year after both India and Pakistan had openly tested nuclear weapons.<sup>1</sup> These recurring conflicts between states which are not satisfied with the existing status quo have hardened military attitudes on both sides and thus account for both the Indo-centric threat perceptions and military doctrines of Pakistan and the Indian military's diligent preparation for armored land and air warfare with Pakistan.

The adoption of nuclear weapons and declaration of nuclear deterrence postures on both sides in May 1998 greatly increased the stakes and consequences of future armed conflict and the gravity of concerns in the international community. How stable is nuclear deterrence between Pakistan and India? Have both sides developed appropriate command and control and nuclear safety measures to prevent accidental nuclear events? How far does nuclear deterrence reach in preventing subconventional and limited conventional conflict? What challenges do nuclear delivery choices and emerging surveillance and active defensive technologies pose to the robustness of nuclear deterrence in preventing war? Does nuclear capability generate any urge on both sides to negotiate risk-reduction measures or efforts to resolve the underlying disputes that stand in the way of a normalization of relations? Can the U.S. play a more effective role both in crisis management, development of threat-reduction measures, and diplomatic resolution of the underlying causes of conflict? How does China's involvement as a nuclear neighbor in Asia affect the dynamics in South Asia, and what effects may be expected of neighboring Iran's drive for nuclear capabilities, or from failure to stabilize Afghanistan?

A non-weaponized form of nuclear deterrence was believed to have come into play between Pakistan and India in the late 1980s, a decade earlier. That perception may have helped prevent

several military crises between 1985 and 1991 from escalating into open warfare. The near simultaneous Indian and Pakistani nuclear breakout in May 1998 brought bilateral nuclear deterrence unmistakably into the picture. U.S. policies toward both countries thereafter aimed mainly at dissuading strategic buildups or stabilizing the new nuclear-armed conditions at low numerical levels, and, where possible, encouraging both sides to resolve their long-standing, underlying causes of conflict. Active U.S. diplomacy was also brought into play during military crises, including in 1990 and in Kargil in 1999.

India and Pakistan both adopted “minimum nuclear deterrence” declaratory postures and non-assembled nuclear weapons in stockpile practices, intended as reassurance measures. Pakistan rapidly enacted and announced a formal nuclear decision-making structure and command and control system, and the U.S. engaged Pakistan with briefings on best practices and personnel security issues. India kept such outside gestures at arms length and moved slower to formalize its own civilian-military nuclear decision-making and command and control arrangements, but announced results in 2004.

Initially, the twin adoption of nuclear weapons may have enhanced Pakistan’s perceptions of military stability in a relationship where India’s much larger and growing conventional capabilities faced Pakistan with a widening conventional imbalance in India’s favor. Pakistan certainly felt nuclear weapons improved its overall defense situation.<sup>2</sup> Neither side seemed to fear a nuclear attack from the other “out of the blue.” On that level, deterrence was operational. Nuclear weapons also raised inhibitions against either side impulsively opening or threatening a major conventional war. As new nuclear weapon states, both sides also moved up the nuclear deterrence learning curve incrementally.<sup>3</sup>

But it soon became apparent that the nuclear overhang did not entirely neutralize Pakistan’s risk-taking inclinations, particularly its readiness to exploit subconventional warfare activities, nor did it block India’s readiness, when push came to shove, to contemplate innovative approaches to conventional warfare beneath the nuclear threshold. Moreover, the initial fig-leaf assurances by both sides that they would avoid nuclear arms racing in the US-Soviet fashion fell away as both sides worked on long-range missile delivery systems, increased nuclear weapons inventories, and explored advanced military surveillance, space, and missile defense technologies. India’s acknowledged activities in this regard also had an eye on China and invested in a longer-range deterrence capacity as well as maritime projection for its position in larger Asia.

Apart from political will to retaliate in extremis, the most important ingredients of stable nuclear deterrence are operational alertness and credible delivery capacity against crucial value targets in the opponent’s interior, invulnerability to sudden preemption of nuclear forces, and a high

threshold of nuclear use. Cold War experience with crises suggests that a corollary condition of stability is firm mutual restraint against launching or allowing conventional strikes directly on the adversary's or its allies' regular military forces, despite other pressures to change the local status quo. Cold War conditions did not rule out ideological competition and proxy warfare in developing regions well beyond the central theater, but essentially ruled out conventional war in Europe (and its close surroundings) as escalatory and likely to ascend to nuclear levels. Violent terrorist and sabotage methods that could have been infiltrated into the opponent's heartland were generally eschewed. These boundaries have not been adhered to fully in South Asia, raising additional doubts about deterrence stability there.<sup>4</sup>

Stable nuclear deterrence between Pakistan and India is under challenge in at least four military-specific ways, from (1) widening imbalances in conventional military capabilities; (2) adoption of asymmetrical strategies and military doctrines; (3) accelerated competition in developing and applying advanced military technologies; and (4) recent unveiling of tactical nuclear weapons which lowers nuclear thresholds, an interest both sides formerly disclaimed. As a result, risk-taking on escalation ladders is now an active arena of engagement, particularly between the ground forces on both sides.<sup>5</sup>

### **Challenges from Asymmetry to Deterrent Stability**

While Pakistan has maintained a substantial ground and air capability to deter and, if need be, combat a major conventional Indian invasion across the border, India's more rapid economic growth and larger procurements of heavy combat equipment since 1991 widens the disparity in the conventional balance year by year. Pakistan also suffers limited strategic depth, which makes it acutely sensitive to the outcome in Afghanistan following scheduled withdrawal of U.S. and NATO combat forces in 2014. Pakistan appears to have sought to counter this growing disparity with India not only with nuclear weapons but with subconventional warfare methods, particularly in disputed Kashmir since 1989. What has therefore arisen since the advent of nuclear weapons in 1998 is a deterrent paradigm between Pakistan and India that is partly non-symmetrical and palpably unstable:

#### *At the nuclear level:*

Each side projects minimum credible deterrence against the other side's potential for strategic nuclear attack by air-delivered and ballistic missile retaliatory forces. In theory, this condition would be quite stable when both countries are politically stable, enjoy robust command and control arrangements, and are confident of low vulnerability of their nuclear forces to preemption, and if neither side has offensive plans or doctrines operating at lower levels. At the nuclear deterrent level currently, capabilities are roughly symmetrical. India advertises a nuclear no-

first-use (NFU) policy, and Pakistan does not, but Indian NFU is declaratory policy and contingency-specific.

*At the conventional level:*

A widening military capability imbalance exists with Pakistan obliged to adapt; Pakistan's purely "conventional deterrence" is still significant but is weakening and it lacks the buying-time options of strategic depth. India's conventional superiority essentially makes deep Pakistani invasion of India infeasible. While Pakistan's nuclear deterrent makes it highly unlikely that India would contemplate an all-out conventional war (fight to the finish) with Pakistan, the Indian Army responded to Pakistan's employment of subconventional warfare at Kargil in 1999 and its own cumbersome mobilization following a terrorist attack on India's parliament in December 2001 with a new offensive doctrine of limited conventional war called "Cold Start" (and more recently, "proactive defense strategies"). This doctrine calls for mobile forces with great firepower, capable of shallow penetration of Pakistan at multiple locations on very short notice – before Pakistan can mobilize and before international diplomatic responses can take effect. The concept assumes that limited punitive strikes and shallow penetrations will not cross Pakistan's "red lines" and trigger a nuclear retaliatory response. In effect, this assumption defies the principle the superpowers came to recognize in practice, that offensive conventional attacks on the opponent's forces are likely to escalate to nuclear levels. Building and maintaining conventional capabilities was important to keep the nuclear threshold high, but caution in offensive use of them was imperative.

*At the sub-conventional level:*

In South Asia today, it is the active pursuit of political objectives by sub-conventional means of warfare that drives instability from the bottom up to the conventional and nuclear levels of military forces. India employed subconventional warfare (built, trained and supported Bengali guerrilla forces) against the Pakistan Army in East Pakistan in the 1971 war and also turned a blind eye to Tamil insurgency in Sri Lanka for a time, so this is not a case of innocence in resort to subversive arts being all on one side.

It is understandable, however, that India responds forcefully to Pakistan-originated Islamic terrorists, often al-Qaeda-inspired, who mount violent attacks in its territory and seek to incite Indian Muslim minorities to rise against the state. It is no secret that Pakistan provided support to extremist groups promoting insurgency in Indian-held Kashmir after 1989, or that the Pakistan-based Jaish-e-Muhammad was instrumental in attacking India's parliament in December 2001 or that Lashkar-e-Tayyaba launched the high-casualty attacks on Mumbai in November 2008, from Pakistani soil. It is also telling that the Pakistan Army launched the Kargil operation in May 1999 under the guise of freedom-fighters contesting Indian control of Kashmir, presumably assuming that

Pakistan's new nuclear deterrent provided impunity against Indian horizontal escalation of the armed conflict.

Thus, the asymmetry of nuclear deterrence objectives in South Asia today, and its challenge to deterrent stability, can be summed up as follows:

- Pakistan wants its nuclear weapons to deter any level of conventional attack by India as well as to deter Indian nuclear attack.
- India wants its conventional military superiority (and limited warfare options) to deter any subconventional or subversive warfare from Pakistan as well as to reinforce its deterrence of nuclear attack by Pakistan.
- Stability is put at risk both by Pakistan's subconventional risk-taking and by India's risk-taking in threatening offensive use of limited conventional warfare options. Both bring built-in propensities to escalation.
- China's prospective involvement in these equations could be a further complication which space does not permit room for analysis here.

### **Challenges to Deterrent Stability from Advanced Technologies**

Advanced technologies can enhance nuclear deterrence and its stability properties, and also have the potential to degrade deterrence. Samuel Huntington argued from analysis of 20<sup>th</sup> century naval arms races as well as the bipolar nuclear setting of the Cold War that quantitative arms buildups are more prone to lead to war than qualitative arms competition. India and Pakistan are engaged in both quantitative and qualitative competition – the directions are clear and expansionary, but the buildup pace is slower and the foreseeable numbers are far lower than those of the superpowers. Both countries have diversified their delivery systems, beginning with strike aircraft, moving on to ballistic missiles, and then to cruise missiles; delivery system plans are also being extended to naval platforms – both surface ships and submarines. Diversification of delivery systems tends to enhance deterrent invulnerability to preemption, and on that dimension tends to be stabilizing.

The challenges to nuclear stability from new military technologies in this setting come primarily from advancements in three generic areas that can increase the vulnerability of the deterrent and its command system to preemption: overhead surveillance, introduction of active missile defense, and the potential for disrupting communications in command and control systems. In addition, in this geographical setting, the short distances and short timelines for delivery system travel are important and make even *conventional* air strike capability (at least by India) a potential threat to ground- and air-based delivery systems, including ballistic missiles when not protected by

hardened silos or mountain tunnels or, in the case of mobile missiles, effective camouflage before crises and during dispersal.

Two of these technology areas are of special concern to Pakistan in ways that reflect the asymmetry of both geography and resources. India has a significant lead over Pakistan in launching satellites and deploying orbital surveillance. This also gives India an advantage in intelligence monitoring and possible early warning of strategic facility and delivery system preparations for action, and target-mapping. (The availability of commercial images of territory means, however, that Pakistan can also do target-mapping of fixed sites without having its own observation satellites, and, with Chinese assistance, it may not be long before it has some satellite capability as well.) The second area is missile defense, in which India also has a lead and which is not likely to be available to Pakistan for a long time. Missile defenses can degrade confidence in assured missile delivery against certain targets. Pakistan appears to be in a position to hedge against missile defenses by increasing its deliverable stockpile. That said, missile defenses with large areal footprints are inordinately expensive and thus are unlikely to affect nuclear stability in South Asia in the foreseeable future. Pakistan's greater concern about missile defenses is the boost it gives to space technologies and to more permissive U.S. and Israeli technology transfer to India.

In the near term, none of these technology challenges is as consequential for stability as the asymmetry in nuclear deterrence objectives and military doctrines.<sup>6</sup>

### **Challenge to Deterrent Stability from Tactical Nuclear Weapons**

After nuclearization in 1998, India and Pakistan both indicated that they would not need or be interested in tactical nuclear weapons. But in April 2011, Pakistan publicized its testing of *Nasr* (HATF-IX), a battlefield tracked launcher carrying twin nuclear-capable ballistic missiles of 60 km range, affirming that this was a tactical nuclear weapon system (TNW) to close gaps in the deterrence spectrum. It was unmistakably a response to the Indian Army's Cold Start posture.<sup>7</sup> In mid-July, India advertized its flight testing of *Prahaar*, a similar battlefield ballistic missile launcher, evidently dual-capable but with range up to 150 km.<sup>8</sup> Thus, each side has recently introduced a fast-firing battlefield ballistic missile system with apparent TNW capability as a new rung on its nuclear escalation ladder just above the conventional military threshold. Operationally, these systems signify a lowering of the nuclear threshold and the compression of decision-makers' reaction time. If forward-deployed, they increase the probability – by a quantum jump -- that the outbreak of even limited conventional war between India and Pakistan along their borders will escalate to nuclear warfare on the battlefield and bring forward the likelihood of escalation to strategic nuclear exchange. The reduction in the stability of mutual nuclear deterrence from fielding such systems along the heavily militarized Indo-Pakistani border seems unmistakable. New stresses on command

and control are inevitable. The additional impetus TNW gives to quantitative arms racing on both sides also appears inexorable.<sup>9</sup>

## **Conclusions**

With the U.S.-Pakistani strategic dialogue in mind, the developments in the Indo-Pakistani military and nuclear deterrent arenas over the last decade provide few reasons for optimism in Washington, D.C. about improving stability in the subcontinent, and perhaps the same is the case in Islamabad and Rawalpindi, albeit for other reasons. Given the huge disparity in size and resources between India and Pakistan, the arrival of nuclear weapons in Pakistan in 1998 added a layer of deterrent strength at first that no one there doubted made Pakistan more secure than before against the perceived threat from India. Pakistan's delivery system development also ensured Pakistan's nuclear reach and the improbability of vulnerability to strategic preemptive attack – conventional or nuclear.

But other developments since then, especially Pakistan's retention of a proclivity for subconventional war over Kashmir and permissiveness toward non-state actors aligned with that strategy has led India to contemplate and seek to refine a sculpted array of conventional military responses to terrorist attacks or subconventional provocations that would not be deterred by the existence of Pakistan's strategic arsenal. If both subconventional and conventional warfare are live options between nuclear armed states, the risks of escalation and loss of control rise to high levels. Anxieties about the war in Afghanistan and the turbulence within Pakistan itself further complicate nuclear stability and efforts to put remedial measures into effect.

Introducing TNW into this mix adds yet another level of coiled spring challenges to conventional and nuclear deterrent objectives, and to the very stability of existential deterrence at the strategic level.

While results are agonizingly slow to materialize, the past areas of U.S. cooperative effort – for example, with Pakistan on measures to improve the safety and security of nuclear weapons and civilian nuclear activities -- have made certain acknowledged gains in Pakistan, and seeds sown earlier in U.S. diplomatic concern about resolving the Kashmir issue, and in bilateral negotiation of nuclear risk reduction measures and strategic restraint may still be discussed and nurtured in the present environment. How the expedition to Afghanistan is wound down is quite critical to a reduction of pressure on Pakistan, related anxiety in India, and, indeed, to the fruitfulness of U.S.-Pakistan relations. Opportunities to further strategic restraint may yet materialize going forward, and U.S. experts on arms control and their counterparts in both countries should be attentive to openings in the landscape. The LLNL initiative under the rubric of the Colombo Project that has



fostered bilateral discussion and concrete understanding outside official channels of missile decommissioning and dismantlement, may yet find a broader field of application as real arms control in official channels. Many other ideas have yet to leave the drawing board.

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<sup>1</sup> Detailed analysis of various dimensions of the Kargil War have been compiled in Peter R. Lavoy, ed., *Asymmetric Warfare in South Asia: The Causes and Consequences of the Kargil Conflict*, Cambridge: Cambridge University Press, 2009.

<sup>2</sup> Representative of this perspective is Naeem Salik, *The Genesis of South Asian Deterrence: Pakistan's Perspective*, Karachi: Oxford University Press, 2009.

<sup>3</sup> Although intentionally focused on India, a detailed treatment of crises and incremental development of nuclear deterrence policies on both sides, from a Pakistani perspective, is offered in Zafar Iqbal Cheema, *Indian Nuclear Deterrence: Its Evolution, Development and Implications for South Asian Security*, Karachi: Oxford University Press, 2010.

<sup>4</sup> This can be attributed in part to India's distinctively distracted approaches to strategy, defense organization and military culture captured by the title of a recent study by Stephen P. Cohen and Sunil Dasgupta, *Arming without Aiming: India's Military Modernization*, Washington, D.C.: Brookings Institution Press, 2010.

<sup>5</sup> For a contemporary analysis of Pakistani and Indian escalation ladders, see Rodney W. Jones, *Nuclear Escalation Ladders in South Asia*, Report by Policy Architects International, for DTRA/ASCO, Report Number ASCO 2011 007, April 2011.

<sup>6</sup> Serious civil-military comprehension of and organizational preparation for the *management of nuclear operations* is another area, arguably, that is crucial both to decisional restraint (avoidance of miscalculation and inadvertent action) and credible deterrence, and therefore to stable nuclear deterrence. India's unusual civil-military structure apparently has prevented this dimension getting the attention that one would expect given the enormity of nuclear weapons. See Vice Admiral (retd.) Verghese Koithara, *Managing Nuclear Forces: India's Underestimated Challenge*, Washington, D.C.: Brookings Institution Press, 2012.

<sup>7</sup> See Rodney W. Jones, "Pakistan's Nuclear Poker Bet," *Foreign Policy*, May 27, 2011, available at: [http://afpak.foreignpolicy.com/posts/2011/05/27/pakistans\\_nuclear\\_poker\\_bet](http://afpak.foreignpolicy.com/posts/2011/05/27/pakistans_nuclear_poker_bet); and the author's "Pakistan's Answer to Cold Start?" *The Friday Times (Lahore)*, May 13-19 issue, 2011, available at: <http://www.thefridaytimes.com/13052011/page7.shtml>.

<sup>8</sup> See "India Successfully Test Fires Prahaar Missile," *The Hindustan Times*, July 21, 2011, accessed at: <http://www.hindustantimes.com/India-news/Orissa/India-successfully-test-fires-Prahaar-missile/Article1-723646.aspx>; and Saher Shohdan, "Prahaar Missile," at *Indian Defence* website, accessed at: <http://www.indiandefence.com/prahaar-missile/>.

<sup>9</sup> See David O. Smith, "The Past as Prologue: A Cautionary Tale of the U.S. Experience with Tactical Nuclear Weapons," a retrospective on the trials and shortcomings of US Army TNW planning and deployments in Western Europe in the early years of the Cold War (a companion paper presented at the US-Pakistan Dialogue at Phuket, Thailand, September, 2011).