Nuclear doctrines and stable strategic relationships: the case of south Asia

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Behind every doctrinal decision that states have to make—especially in relation to nuclear weapons—are two basic questions: one, at the substantive level, what kind of role it envisages for (in this case) nuclear weapons in meeting the country's most important security challenges; and two, with how much clarity and specificity, or conversely ambiguity, should the doctrine be expressed. Well-thought-out nuclear doctrines are ideally founded on a strong conception about the role, purposes and limitations of nuclear weapons, how those weapons fit into the pursuit of a country's grand strategy, and a set of core beliefs and ideas about the operationalization of the weapons to reflect a sound balance of all these different facets. The potential for nuclear instability is greatest where a doctrine reflects either a lack of strategic thought or some kind of strategic drift in conceptualizing how nuclear weapons feature within a country's grand strategy, or where there is a clear mismatch between the security challenges faced by a state and the kind of role it assigns to nuclear weapons.

The choice between ambiguity and clarity often feeds into this dynamic. Ambiguous doctrines, when they reflect either kind of strategic uncertainty noted above, can be a source of dangerous miscalculation and inadvertent escalation of tensions. This is especially true in new nuclear states that lack experience with respect to the limitations of nuclear weapons. Yet new nuclear states also tend not to state their doctrines unequivocally, relying on ambiguity to maximize the deterrent effects and political utility of their nascent nuclear forces. Ambiguity, then, may be a short-term necessity, but in the longer term can end up being counterproductive.

Against the background of the dilemmas presented by the doctrinal and posture choices of nuclear states, this article offers a discussion of nuclear doctrines, and their significance for war, peace and stability in what is possibly the most active nuclear region in present times—south Asia. The cases of India and Pakistan are offered to show the challenges new nuclear states face in articulating and implementing a proper nuclear doctrine. It is argued here that the nuclear doctrines and postures of both India and Pakistan are problematic from a regional security perspective, but for somewhat different reasons. In India's case, newer challenges and a lack of strategic focus have led to increasing ambiguity in a doctrine that at its inception suggested both a certain level of clarity and

the prospect of imparting stability. A process of strategic drift appears to have seen the fundamental principles underlying the country's nuclear posture gradually undermined, leading to signals being conveyed to Pakistan that have clear instability-generating effects.

Pakistan, on the other hand, has consistently presented a doctrinal posture that is not only deliberately ambiguous but also—and more importantly—envisages a more ambitious task for nuclear weapons than is warranted within an already destabilizing, revisionist grand strategy. The mixing of nuclear weapons with an asymmetric strategy in Kashmir is of particular concern. The problems in the Indian doctrine have only encouraged these tendencies, with the result that as both India's and Pakistan's nuclear doctrines and postures evolve, the risks of a spiralling nuclear arms race in the subcontinent are likely to increase unless doctrinal issues are reassessed in both New Delhi and Islamabad.

Consequently, a case is made here for more clarity and less ambition from both sides in reconceptualizing their nuclear doctrines. Given the nature of the problems posed, and faced, by the two sides, however, such change is likely to be significantly easier for New Delhi than in Islamabad, in view of the latter's fundamentally revisionist agenda in the region. Later sections of this article discuss the challenges to change, but the conclusion is nevertheless reached that there is sound logic and merit in recommending substantive doctrinal change on both sides with a view to achieving greater nuclear stability in the region.

The next section of the article fleshes out some of the basic conceptual issues, including the main characteristics of nuclear doctrines and considerations vis-a-vis stability. The section after that identifies some of the major concerns in the Indian and Pakistani nuclear doctrines, reviews the specific issues, doctrinal challenges and contradictions that are contributing to nuclear risk in the region, and considers how they reflect the problems identified in the first section. In the following section we will highlight the lessons that can be drawn from this analysis, identify doctrinal changes required to reverse the destabilizing trends, and discuss the prospects for, and obstacles to, such changes actually being made. The final section provides some concluding thoughts.

About nuclear doctrines

Nuclear doctrines form a subset of the larger concept of military doctrines, which denote the military component of a state's 'grand strategy'—'a political-military, means-ends chain, a state's theory about how best it can "cause" security for itself'. They can be seen as a state's theory of how best to produce security (specifically military security) using nuclear weapons. To observers, understanding of a state's nuclear doctrine is central to a consideration of how nuclear weapons 'will be used and how the presence of these weapons might affect international relations

Barry R. Posen, The sources of military doctrine: France, Britain, and Germany between the World Wars (Ithaca, NY: Cornell University Press, 1984), p. 13.

generally'. Consequently, like other doctrines, nuclear doctrines can contribute more or less to both the security of the country concerned, and stability in the regional or global context, depending on how they are conceptualized.

Security implications of nuclear doctrines

Nuclear doctrines, in theory, seek to serve two major purposes for states that adopt them. First, they clarify the role of nuclear weapons in grand strategy for the leadership and relevant security personnel. They identify the threats against which nuclear weapons are expected to be used, the ways in which nuclear weapons will be put to operational use to counter those threats, the ways and means by which nuclear weapons will be deployed for use in peacetime and in contingencies, and the command and control mechanisms that will govern the handling of these weapons. To the extent that a nuclear doctrine does this efficiently, it establishes a set of standard operating procedures for the handling of nuclear weapons in times of peace and in times of crisis, and therefore ensures effective utilization of the possession of nuclear weapons.

Second, nuclear doctrines serve a signalling purpose, intentional or unintentional, with respect to external actors and the broader international community. Because intentions are always difficult to decipher, 'in watching one another, states focus on military doctrines and attribute intention based on that'.³ Nuclear doctrines and postures at a general level signal to any adversary, and other important actors, especially Great Powers, the broader goals behind the possession of nuclear weapons. They also give external actors an indication of the potential for stability or instability inherent in the possession of nuclear weapons by a particular country.⁴ At a more specific level, doctrines may point to specific actions of adversary states that will lead to a nuclear response, and what that response could look like. They identify thresholds or 'red lines', the crossing of which would lead to a nuclear response. By clarifying these issues, states can further create the all-important 'credibility' that needs to accompany efforts at deterrence based on nuclear weapons.⁵

Determining what a state's doctrine actually is, and whether and how well it serves the basic signalling purposes, is not a simple task. Nuclear doctrines, like doctrines of any other kind, can be either explicitly declared and detailed, or implicit and general. States may choose to make their nuclear doctrines public, or may choose to keep them secret, making public—if anything—only the general outlines of the doctrine. As Tellis has argued, while the western, especially American, tradition in terms of nuclear doctrines has emphasized the explication of the

² James J. Wirtz, 'Introduction', in Peter Lavoy, Scott Sagan and James Wirtz, eds, Planning the unthinkable: how new powers will use nuclear, biological, and chemical weapons (Ithaca, NY: Cornell University Press, 2000), p. 8.

Wirtz, 'Introduction', pp. 16–17.

⁴ Timothy D. Hoyt, 'Pakistani nuclear doctrine and the dangers of strategic myopia', *Asian Survey* 41: 6, Nov.–Dec. 2001, pp. 956–77.

⁵ Rahul Roy-Chaudhury, 'Nuclear doctrine, declaratory policy, and escalation control', Henry L. Stimson Center, 2004, p. 114, http://www.stimson.org/images/uploads/research-pdfs/ESCCONTROLCHAPTER5. pdf, accessed 12 Nov. 2015.

minutiae of capabilities, doctrine, posture, and command and control, this is not the path that most other nuclear states have chosen to follow. Newer nuclear states have been far more hesitant in declaring their doctrines with any great level of explicitness. While India has a quasi-declared doctrine, it is far less detailed than, for instance, American doctrines have been. Pakistan and Israel have chosen to leave their doctrines entirely undeclared, shrouding their nuclear intentions in ambiguity.

That some countries have chosen clarity and others ambiguity is not surprising given that, as noted above, there are benefits and drawbacks to each option. This trade-off is especially apparent in the case of newer nuclear states, for which the decision of whether to be explicit or vague can be based only on a judgement of how much each option contributes to the logistical and signalling tasks the doctrine is intended to perform. An explicit doctrine by definition will present a state's posture more clearly, and therefore may impart nuclear signals with more credibility when this is most urgently required. A lack of clarity, conversely, may encourage an adversary with a high risk threshold to engage in probing actions, or a security-driven adversary to doubt the nuclear state's intentions, thereby creating the potential for an inadvertent spiral of escalation; an explicit doctrine is likely to avoid such outcomes. Moreover, in addition to conveying threats more credibly, clarity can also—where necessary—serve the purpose of reassuring the international community through transparency.⁷

At the same time, however, public doctrines carry potential risks for newer nuclear states. Officials may be reluctant to articulate doctrines publicly where capabilities are not fully developed, and where their premature revelation may expose the state to the risk of 'precipitate probing tests on the part of its adversaries who may seek to discern both its limits and its vulnerabilities'. Keeping doctrine private might also have the benefit of creating enough uncertainty for an opponent—both about the state's capabilities and about its 'red lines' and potential responses to particular provocations—to discourage it from engaging in escalatory behaviour, thereby reinforcing the deterrent effects of the weapons. A fear of being dragged into an arms race may similarly motivate states to avoid revealing their capabilities or their actual deployment and use policies, especially if that information is likely to worry an adversary. Finally, of course, states may choose not to explicate a doctrine—especially in any detail—simply because they believe their goals are limited and straightforward enough not to require such development.

Given these trade-offs between clarity and ambiguity, while doctrines—to the extent that they are made public at all—do tell us something about the nuclear strategies of states, the best indicators of intent and policy often lie in their actual practices in the acquisition and deployment of weapons—that is, in the state's nuclear 'posture'. A state's nuclear posture, in terms of the numbers of

Ashley J. Tellis, 'India's emerging nuclear doctrine: exemplifying the lessons of the nuclear revolution', NBR Analysis, 2001, p. 25, http://www.mdcbowen.org/p2/ww3/i_nuke_doctrine.pdf, accessed 8 Nov. 2015.

⁷ P. R. Chari, 'India's nuclear doctrine: confused ambitions', Nonproliferation Review 7: 3, Fall/Winter 2000, p. 3.
8 Tellis, 'India's emerging nuclear doctrine'.

weapons, their nature, deployment, alert status, and command and control, tells us somewhat more than any declared doctrine, because declarations are arguably just that: they are neither binding nor informative about how effectively they will be implemented by the adopting state. Even declared doctrines, therefore, are useful only to the extent that actual actions on the ground reflect the objectives and principles they articulate. It is the details of posture—as perceived by others—that determine whether the effects of a country's doctrine are stabilizing or not.

The big concern, then, from the perspective of stability, is whether and how well doctrinal choices—whether explicit or implicit—serve the internal and external signalling and logistical purposes they are designed to serve. Where, for instance, ambiguity leads to the wrong conclusions being drawn abroad, or policy and operational drift at home, it is clear that the doctrinal choices may prove ineffective—and even dangerous—from a strategic vantage-point.

While the choice between ambiguity and clarity of doctrine can itself contribute to stability or instability, of greater import most often is the actual substance of a doctrine and its implementation in posture. Barry Posen has succinctly argued that doctrines matter in two significant ways: first, in how they improve or impair the security of the state that holds them, and second, in how they affect the quality of international political life. ¹⁰ At a basic level, doctrines best promote state security interests when they are well integrated with the actual political requirements of grand strategy, and can innovate in response to changing environments. Doctrines can be potentially disastrous when they are inappropriate for the political and military ends sought, and are too static. In addition, as discussed above, doctrines are effective in enhancing security to the extent that they ensure logistical clarity within a state, and accurately and credibly signal intent externally.

The consequential effects of doctrines are of course not exclusive to the security of the states that hold them. The impact of any doctrine on the quality of international life in general depends on the nature of that doctrine, which in turn is influenced by the grand strategic goals of the holding state. In general, nuclear weapons have been adopted with the aim of exercising a deterrent effect. While this does impart an element of stability to nuclear relationships, the specifics of how a doctrine seeks to establish deterrence, or undermine that of the other side, have a great influence on whether that doctrine, and the associated nuclear posture, will tend to generate stability or instability. Naturally, the more a doctrine is geared towards an offensive grand strategy or intention—as opposed to a defensive or deterrent doctrinal position—the more likely it is to cause concern in other states and exacerbate instability and security dilemmas. This is especially likely to be the case where the possession of nuclear weapons is seen in the context of the pursuit of revisionist grand strategic ambitions, be they on the basis of power, ideology or territory.

⁹ Wolfgang K. H. Panofsky and George Bunn, 'The doctrine of the nuclear-weapon states and the future of non-proliferation', Arms Control Today 24: 6, July-Aug. 1994, p. 6. See also Vipin Narang, Nuclear strategy in the modern era: regional powers and international conflict (Princeton: Princeton University Press, 2014).

¹⁰ Posen, The sources of military doctrine, pp. 15-24.

Given the vital signalling purposes served by nuclear doctrines, both internally and externally, good doctrines—or postures communicating more implicit doctrines—must do two things: reflect moderate ambitions (deterrence/defence); and be well matched or integrated with major security goals. Failure on either count risks giving rise to uncertainty and misperception both internally and externally. Especially with external actors, signalling problems—either deliberate, arising from an overly ambitious agenda for nuclear weapons, or inadvertent, owing to a failure to appropriately match doctrine to security goals—risk exacerbating concerns about the destabilizing effects of nuclear weapons in the state's possession, potentially triggering an arms race. It is therefore important that doctrines, whether explicit or implicit, do not fall prey to these basic problems. In many ways, as has been extensively discussed elsewhere, the Cold War-era experience with superpower nuclear doctrines is instructive. While ostensibly nuclear weapons did much to keep the conflict 'cold', the period also illustrated the perverse security consequences of doctrinal decisions.¹¹

What, then, do the Indian and Pakistani nuclear doctrines look like? And, more importantly, how do they address the issues highlighted above, and with what consequences for regional nuclear security and stability?

India's and Pakistan's nuclear doctrines

In this section of the article we evaluate India's and Pakistan's nuclear doctrines in the context of the preceding discussion. We argue that on both sides there are tendencies that contribute to increasing instability on the nuclear front. Whether due to excessive ambition for nuclear weapons—specifically in Pakistan's case—or due to ambiguity, driven by a lack of strategic clarity, nuclear doctrines and postures on both sides have increasingly adopted characteristics that are less likely to engender stability and more likely to provoke arms racing and generally destabilizing dynamics.

India

India's nuclear doctrine and operationalization plans have been explicated first in an August 1999 draft nuclear doctrine prepared, following the 1998 nuclear tests, by India's National Security Advisory Board, and subsequently in a statement issued by the government of India in January 2003. The core features of the doctrine are as follows: India will build a 'credible minimum deterrent' based on land-, air- and sea-based capabilities; the deterrent will be based on the principle of massive retaliation authorized by the civilian leadership against nuclear attacks on Indian territory or forces; India will adopt a no-first-use posture, and will not use nuclear weapons against non-nuclear weapon states; however, the country

Panofsky and Bunn, 'The doctrine of the nuclear-weapon states'; Carl Kaysen, Robert S. McNamara and George W. Rathjens, 'Nuclear weapons after the Cold War', Foreign Affairs 70: 4, Fall 1991; Richard Ned Lebow and Janice Gross Stein, We all lost the Cold War (Princeton: Princeton University Press, 1994).

reserves the option of retaliating with nuclear weapons if hit by major chemical or biological attacks. ¹²

These core characteristics of India's doctrine are derived from both normative and instrumental considerations. Normatively, it seeks to convey India's restraint and essential attachment to the status quo, and in general is tied to India's stated commitment to non-proliferation and disarmament over the years. In keeping with this stance, in 2014 the prime minister at the time, Manmohan Singh, called for all nuclear weapon states to 'quickly move to the establishment of a global no-first-use norm'. In an instrumental sense, the minimum-deterrent posture based on a no-first-use pledge precludes building an operational system on a hair-trigger alert, or the amassing of large quantities of weapons or delivery systems beyond what is needed for a minimum deterrent capability, and thereby avoids the massive costs and potential for instability associated with more expansive arsenals. In the state of the state

The underlying bases of India's doctrine, both at a normative level and in terms of substance—a minimum credible deterrent—have the features required to make it a stabilizing force in the strategic context of the subcontinent. However, faced with the complex security environment arising from Pakistani actions, India's actual posture has increasingly drifted in directions that have undermined the logic of a credible minimum deterrent, with the development of an ambiguity that threatens to contribute to the destabilizing trends in the subcontinent. Crucially, these changes, rather than being deliberate shifts, are for the most part the inadvertent consequences of a failure—at least so far—to find a response to this complex regional environment within the parameters of India's declared doctrine. In the absence of decisive strategic thought at a central level, there has been an element of drift in the lower levels of government and bureaucracy—a failure of internal signalling—which has opened the way for shifts that threaten to vitiate India's minimal deterrent posture, and thereby disconcert Pakistan, in turn prompting actions from the latter that further destabilize the regional nuclear context.

The core strategic dilemma confronting India—one that has yet to be satisfactorily resolved—is that posed by Pakistan's asymmetric strategy of, as some have termed it, 'bleeding India by a thousand cuts'. ¹⁵ As others have noted—a point we will discuss in more detail below—the cover of nuclear weapons has afforded Pakistan greater opportunity to pursue such a *modus operandi*, increasingly using non-state terrorist groups, as illustrated in the Kargil offensive of 1999 and more recently

Government of India, Prime Minister's Office, press release, 'Cabinet Committee on Security reviews progress in operationalizing India's nuclear doctrine', 4 Jan. 2003, http://pib.nic.in/archieve/lreleng/lyr2003/rjan2003/04012003/ro40120033.html, accessed 8 Nov. 2015.

¹³ 'Prime Minister proposes no-first use of nuclear weapons', *Indian Express*, 2 April 2014, http://indianexpress.com/article/india/india-others/prime-minister-proposes-no-first-use-of-nuclear-weapons, accessed 8 Nov. 2015.

Tellis, 'India's emerging nuclear doctrine'; C. Raja Mohan, 'No first use and India's nuclear transition', paper presented at Pugwash meeting no. 279, London, 15–17 Nov. 2002, p. 5, https://pugwashconferences.files. wordpress.com/2014/05/200211_london_nws_paper_rajamohan.pdf, accessed 12 Nov. 2015.

¹⁵ Sumit Ganguly, 'Pakistan: neither state nor nation', in Jacques Bertrand and André Laliberté, eds, Multination states in Asia: accommodation or resistance (New York: Cambridge University Press, 2010), p. 96.

the 2008 Mumbai terror attacks.¹⁶ This context poses major doctrinal questions for India, on both the nuclear and conventional fronts, raising the acute dilemma of how to counter such threats credibly without destabilizing the regional order.

On the nuclear front, the issue relates specifically to India's retaliatory and no-first-use policies against the backdrop of the 9/II attacks in the United States and those of 2008 in Mumbai. Fears have grown about the possibility of terrorist groups gaining access to chemical, biological and crude nuclear devices, in the context of (as discussed below) the highly delegated nature of Pakistan's command and control, and the possible existence of rogue or radical elements within its nuclear and military establishments. The A specific contingency that could severely test Indian policy-makers would be an unauthorized or terrorist nuclear, biological or chemical attack on Indian territory, troop formations or nuclear facilities. Questions arise about how the Indian government might respond in the event of such an attack, especially if there were some credible information—as in the case of the Mumbai attacks—that sections of the Pakistani military or scientific community had colluded with the terrorists.

On the conventional side, similarly, the major conundrum for the Indian government, certainly since the Kargil war of 1999, has been how to respond to the scope that nuclear arms appear to have given Pakistan to more freely pursue a strategy of limited and asymmetric hostilities against India. Having recently experienced several high-profile terrorist attacks by groups operating out of Pakistan and under the tutelage of Pakistani agencies, India has to find ways and means to stem Islamabad's growing confidence that the umbrella of nuclear weapons provides sufficient cover for the pursuit of such activities. How India can respond effectively to this threat, at the least possible cost to nuclear stability—and without provoking dangerous nuclear escalation—is perhaps the most urgent dilemma facing Indian leaders from a security perspective.

On both fronts, the apparent response—to the extent that there has been one—has threatened to introduce destabilizing elements into India's nuclear and conventional posture, by undermining and signalling a shift away from the minimal deterrent that India professes on paper. Perhaps most troublingly, this change has eventuated without any actual deliberate strategic decision made by the Indian government to that effect, and with little evidence that it resolves any of the dilemmas confronting Indian policy-makers. Such change as we see in Indian doctrine and posture seems to be a result of confusion or lack of strategic thought, leading to strategic drift, opening the way for developments that promise more risk, but with little benefit to India's security interests.

The threat of potential WMD use on Indian soil or against Indian troops by unauthorized state or non-state terrorist actors from Pakistan has, for instance, increasingly focused attention and put pressure on New Delhi's no-first-use pledge and minimal deterrent. This became a topic of debate—albeit momentarily—

S. Paul Kapur, 'Ten years of instability in nuclear South Asia', International Security 33: 2, Fall 2008, pp. 71–94.
 On the dangers of nuclear terrorism in south Asia, see Rajesh M. Basrur, Minimum deterrence and India's nuclear security (Stanford, CA: Stanford University Press, 2006), ch. 6.

during campaigning for the 2014 national elections, with the Bharatiya Janata Party (BJP, now in government) hinting at the possibility of reassessing the no-first-use clause. Of particular concern is the aspect of India's doctrine that envisages the purpose of the Indian nuclear arsenal as including deterrence and potential retaliation against chemical and biological attacks.

Although consistent with the nuclear policies of all first-generation nuclear states except China, such a stance would be problematic in India's case. For one, while diminishing the minimal nature of the nuclear doctrine—by not confining nuclear retaliation to nuclear attacks alone—it is unclear that such a stance would really deal with the threat posed. There are serious questions about the logic and even the credibility of a claim that the Indian state would respond with nuclear means to a chemical or biological attack by non-state actors, thereby enabling an escalation completely out of proportion with the initial provocation. To be clear, the problem highlighted here is not—despite such a doctrinal posture—that India will in fact respond in such a manner to chemical or biological attacks; rather, it is that, as one scholar has opined, 'given the volatile ground realities in south Asia, it is not clear how India would react if attacked by chemical and biological weapons by a non-state actor'. ¹⁸ The uncertainty is magnified by the fact that it is far from clear what would constitute a 'major' (as the doctrinal statement puts it) chemical or biological attack. 19 In the absence of clear answers to such questions, the ambiguity now present in the doctrine adds little credible deterrence to India's policy, while diminishing the country's minimal deterrent stance, with negative effects for nuclear stability in the subcontinent.

At the conventional level, the challenge of deterring Kargil-style attacks or terrorist activity emanating from Pakistan has led to the consideration, most prominently, of the 'Cold Start' doctrine. This doctrine envisages Indian troops undertaking rapid, limited offensives into Pakistani territory in retaliation for egregious acts of violence carried out by the Pakistani state or its agents against Indian targets, as in the case of a terrorist attack, without breaching any of Pakistan's nuclear red lines. ²⁰ As critics have argued, however, Cold Start presents the prospect of pushing the Pakistani nuclear posture in increasingly destabilizing directions, with few guarantees that even a purely air-based Indian offensive on specific targets will not lead to a dangerous escalatory spiral. ²¹ This is arguably

¹⁸ Harsh V. Pant, 'India's nuclear doctrine and command structure: implications for India and the world', Comparative Strategy 24: 3, July 2005, p. 282 (emphasis added).

¹⁹ Gurmeet Kanwal, 'India's nuclear doctrine: need for a review', Center for Strategic and International Studies, Washington DC, 5 Dec. 2014, http://csis.org/publication/indias-nuclear-doctrine-need-review, accessed 8 Nov. 2015.

On this, see Subhash Kapila, 'India's new "Cold Start" war doctrine strategically reviewed', South Asia Analysis Group paper no. 991, 4 May 2004, http://www.southasiaanalysis.org/paper991, accessed 8 Nov. 2015.

George Perkovich and Toby Dalton, 'Modi's strategic choice: how to respond to terrorism from Pakistan', Washington Quarterly 38: 1, Spring 2015, pp. 23–45; Vipin Narang, 'Posturing for peace? Pakistan's nuclear postures and south Asian stability', International Security 34: 3, Winter 2009–10, pp. 74–6. Critics point out that the complex regional order could create an escalation to nuclear conflict, while if war remained limited the outcome would be a stalemate, not solving any of the security problems of the two states. On these and other constraints of the limited war option, see Arzan Tarapore, 'Holocaust or hollow victory: limited war in nuclear south Asia', research paper, Institute of Peace and Conflict Studies, New Delhi, Feb. 2005, http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?lang=en&id=20101, accessed 8 Nov. 2015.

precisely what has happened as the Pakistani state—petrified about the prospect of Indian conventional superiority being used to threaten its sovereignty—has reportedly moved towards the acquisition of low-yield tactical nuclear weapons and their increasingly delegated operationalization.

Furthermore, even if India were to act in the manner Cold Start envisages, questions arise about the credibility of India's implicit threats. For instance, if there were signs of Pakistan preparing for a nuclear launch, would India be prepared to pre-empt the attack with its own nuclear forces, abrogating its no-first-use policy? Similarly, can there be any credibility attached to India's doctrinal claim of 'massive' retaliation in a scenario in which Pakistan resorts to the use of tactical nuclear weapons against specific Indian troop formations on its own territory? If massive retaliation is not credible, does this mean that India will respond to Pakistan's tactical nuclear weapons with low-yield usable weapons of its own to impart credibility to Cold Start?

It is unclear how India's emerging nuclear doctrine addresses these basic contradictions, and of course it is far from certain that Cold Start is how the Indian leadership conceives responding to the challenges posed by Pakistan. For one thing, there is little reason to believe that the doctrine is more than a mere concept. The Indian armed forces, as one analyst has pointed out, simply lack the 'necessary logistics, materiel, and command and control architecture to implement' Cold Start.²² What is apparent, though, is that it is not deliberate Indian strategic, doctrinal decisions that are pushing regional dynamics in more destabilizing directions. Rather, it is the very lack of a concerted effort at resolving these problems at the policy level that has created a context of drift wherein ideas that have little chance of implementation in the foreseeable future nevertheless undermine some of the core bases of India's stated doctrine, further pushing the subcontinental nuclear relationship in more dangerous directions, without—crucially—offering any real solutions to the actual challenges they are intended to address.

A corollary to the case of Cold Start, presenting very similar concerns, can be seen in Indian efforts at developing an active ballistic missile defence (BMD) system, initial testing of components of which was claimed to have been successful in 2011. In theory, the BMD programme aims to overcome some of the problems of Cold Start identified above, by undermining the credibility of the Pakistani nuclear deterrent, and serving as a shield for India's own conventional plans. As in the case of Cold Start, however, there are in practice major problems with this agenda. First, there are the major logistical problems associated with building an effective BMD system in the first place—something even the United States has had considerable difficulty accomplishing. A foolproof BMD is therefore an impossibly ambitious goal, especially in the subcontinental context where missile flight times are extremely short because of the limited distances involved, which means not only that the technological challenge of intercepting every single incoming missile is immense, but also that a multilayered system similar to that envisaged by the US is not practicable in south Asia.

²² Narang, 'Posturing for peace', p. 74.

An impractical solution to an immediate problem, once again, adds little to India's security, but on the contrary has provided Pakistan with a rationale for its pursuit of actions that further complicate and endanger regional nuclear stability. The most obvious response in Islamabad has been to rapidly expand its nuclear arsenal to something like 110 weapons, larger than India's 100 or so weapons. ²³ Even more dangerous, as we shall discuss in the next section, is the increasing emphasis in Pakistan on the use of tactical nuclear weapons, with those of 60-kilometre range reportedly having been already deployed to the border.

The larger problem in the India case, therefore, seems to be that, faced with an undoubtedly complex strategic environment created by Pakistan's pursuit of asymmetric conflict under the cover of its nuclear deterrent, India's response has been characterized by a lack of strategic thinking and innovation. There seems to be a real problem of mismatch between the security context that confronts India vis-à-vis Pakistan in particular, and the nuclear doctrine and posture that India currently holds. Underlying this mismatch seems to be a lack of centralized strategic thought on what purposes India's nuclear weapons are designed to serve, and whether the ways in which this nuclear capability is being operationalized are in fact congruent with the security challenges India currently confronts. In the absence of such strategic thought, doctrinal policy has had the appearance of drift, allowing for the rise to public prominence of putative responses that, while contributing little to resolving the challenges India in fact faces, have seen the actual posture move in directions that might exacerbate existing tendencies towards instability in south Asia.

Nothing characterizes this trend more than, as one scholar has noted, the apparent dilution of the basic pillars of India's declared doctrine. This dilution, furthermore, has had real implications for India's posture—as the same scholar has noted—in that it has allowed programmes of questionable value (such as BMD) to be driven less by central strategy and more by the unrestrained bureaucratic manoeuvring of India's Defence Research and Development Organization (DRDO).²⁴ Regardless of the lack of viability of many of these programmes, the result has been that to Pakistan, 'the combination of a layered ballistic missiles defence system, lower-order use options, and MIRVs starts looking a lot less minimal and potentially like something much more aggressive, such as a "splendid first strike" ambition or an escalation dominance posture." All of this, ironically, suggests that the Indian doctrine—arguably initially designed to be explicit—has begun assuming properties of ambiguity, specifically about the purposes assigned to the weapons in India's grand strategy. This ambiguity in turn has both created destabilizing tendencies in India's posture and fuelled moves in Pakistan that increase nuclear risks in the region.

Certainly, the task of resolving these doctrinal issues is not a simple one, especially given the additional layer of complexity added by the fact that India's

²³ Arms Control Association, 'Nuclear weapons: who has what at a glance', fact sheets and briefs, April 2015, http://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat, accessed 8 Nov. 2015.

²⁴ Vipin Narang, 'Five myths about India's nuclear posture', Washington Quarterly 36: 3, 2013, pp. 152–3.

²⁵ Narang, 'Five myths', p. 146.

nuclear doctrine must account for more than Pakistan alone. China has traditionally featured heavily in India's deterrence calculus, and was even cited by the Indian leadership in the immediate aftermath of the 1998 nuclear tests as the country's number one adversary. Consequently, any steps India takes with regard to building a credible deterrent *vis-à-vis* China—through either numerical or technological advances—is likely to be viewed, either sincerely or instrumentally, in Islamabad as threatening Pakistan's deterrent against India. The China factor therefore has the potential of independently driving a nuclear arms race in south Asia. This reflects the classic action—reaction model, a competitive dynamic that is leading both India and Pakistan away from the declared doctrinal stance (at least in India's case) of minimal deterrence. India's doctrine as it currently stands seemingly has no conception of how to address the vitiating dynamics introduced by the China factor in south Asia.

None of this is to say that New Delhi is oblivious to the doctrinal challenges it faces. There is a vigorous scholarly debate on these issues in the strategic community in India, and occasional recognition of the problem in the state's national security apparatus. In April 2013, for instance, Shyam Saran, convener of the National Security Advisory Board, stated that India would retaliate massively if even a small nuclear weapon were used by Pakistan.²⁶ The nuclear doctrine issue again came to the fore in the lead-up to the May 2014 general election, decisively won by the BJP. The party's election manifesto promised to 'study in detail India's nuclear doctrine, and revise and update it, to make it relevant to challenges of current times'.²⁷ By June 2015 this had still not happened. Any attempts to clarify these issues have therefore either been inadequate or have only added further complications to India's doctrinal problems. As the peace process with Pakistan has stalled, the possibility of a terrorist strike initiated from Pakistan, similar to that on Mumbai, has increased, adding renewed urgency to the matter of the nuclear doctrine.

Pakistan

Pakistan's pursuit of nuclear weapons has its origins in the country's efforts to offset its overwhelming conventional inferiority vis- \dot{a} -vis its long-time rival, something that became most painfully apparent in 1971 with the division of the country. Ever since that time the Pakistani elite has considered nuclear weapons to be a great strategic equalizer, the key to preserving Pakistan's security against the existential threat perceived to be posed by a hostile India. In that sense, even though Pakistan has—in contrast to India—adopted a more ambiguous and undeclared doctrinal position, deterrence, based on the threat of first use of nuclear weapons, is ostensibly the main purpose of the Pakistani nuclear weapon capability.

Indrani Bagchi, 'Even a midget nuke strike will lead to massive retaliation, India warns Pak', Economic Times, 30 April 2013, http://articles.economictimes.indiatimes.com/2013-04-30/news/38930173_1_pakistan-shyam-saran-india, accessed 8 Nov. 2015.

²⁷ BJP election manifesto, http://www.bjp.org/images/pdf_2014/full_manifesto_english_07.04.2014.pdf, accessed 12 Nov. 2015.

However, from its actions and evolving nuclear posture, it is apparent that the Pakistani elite views the role of nuclear weapons as extending beyond the task of basic deterrence against the prospect of an existential threat from India. In this case, then, the problems for stability emerge from a fundamental mismatch between the security challenges that nuclear weapons were intended to solve, and the actual tendency in Pakistan to overstate the utility of nuclear weapons to address other agendas. This in turn has been the fundamental fuel for the action—reaction spiral of Pakistan—India nuclear dynamics towards increasingly destabilizing directions.

The nub of the issue, of course, is the Pakistani state's overambitious agenda for nuclear weapons, on which it relies to meet a large set of national security goals. Of central concern—as discussed earlier, and as many scholars have pointed out—is the pursuit, under the cover of nuclear weapons, of a fundamentally revisionist agenda vis-a-vis India. The existence of a nuclear deterrent has allowed Pakistan to pursue its goal of territorial revisionism in Kashmir through asymmetric means of limited military offensives (as in Kargil) and fomenting terrorism as part of the 'bleeding by a thousand cuts' strategy.

Even beyond this essential revisionism, from a purely deterrence-based perspective it is clear that Pakistan's elite envisages putting the country's nuclear weapons to expansive uses, much beyond the claim of its being a 'credible minimum' deterrent. This is apparent from extensive interviews conducted in 2002 by an Italian arms control group, Landau, with members of the Pakistani military elite. According to Landau's report, the red lines or thresholds that would be likely to precipitate nuclear use by Pakistan include:

a. India attacks Pakistan and conquers a large part of its territory ... b. India destroys a large part of its land or air forces ... c. India proceeds to the economic strangling of Pakistan ... d. India pushes Pakistan into political destabilization or creates a large scale internal subversion in Pakistan.²⁸

The latter two points are especially problematic with respect to the threshold at which Pakistan would pull the nuclear trigger. The doctrine and strategy thus remain ambiguous and lack clarity owing to this very expansiveness, based as they are on wishful thinking among the elite that nuclear weapons can offer a cure for all forms of actual and imagined security threats emanating from India.

The consequences of this expansive agenda are, of course, troubling from the nuclear security perspective. Beyond the fact of ambiguity, and the potential for miscalculation it might create, are the more troubling instability-generating effects of the Pakistani nuclear posture. The expansive aims ascribed to the Pakistani nuclear weapons programme have certain immediate effects. First, to the extent that it is marshalled in aid of revisionist goals, such a posture has directly prompted India into attempts to find potential solutions to such provocations in the form of Cold Start and the BMD programme—solutions that themselves have destabilizing implications, as pointed out above. Second, to the extent that the Pakistani

²⁸ Paolo Cotta-Ramusino and Maurizio Martellini, 'Nuclear safety, nuclear stability and nuclear strategy in Pakistan', Landau Network-Centro Volta report, 21 Jan. 2002, pp. 3, 5-6, http://www.centrovolta.it/landau/ content/binary/pakistan%2520Januray%25202002.pdf, accessed 12 Nov. 2015.

posture envisages an expansive role for the weapons—in terms of both offence and deterrence—it requires, in order to be credible, the possession of capabilities that threaten retaliation to Indian actions at different levels of conventional and nuclear escalation.

Both challenges have led Pakistani leaders to believe that they need to adopt a credible, and highly problematic, first-use policy—what Narang has termed an 'asymmetric escalation posture'. ²⁹ Pakistan's strategy—in aid of which it has tested and deployed short-range missiles on its border with India—envisages the deployment of low-yield weapons on mobile multi-barrel launch systems with 'shoot and scoot attributes': that is, the ability to fire and move rapidly around different locations. The apparent aim is to make India's Cold Start doctrine non-operational, as 'salami-slice' attacks will be deterred by the threat of limited nuclear responses, thereby giving Pakistani policy-makers continued flexibility to pursue asymmetric means of coercing India into acceding to their revisionist demands. ³⁰

The risks of this Pakistani policy for the stability of nuclear south Asia cannot be overstated. In the first place, the belief that such a nuclear posture can sufficiently deter any Indian conventional offensive has arguably emboldened both the Pakistani state and non-state actors operating from Pakistan to become increasingly ambitious in their targeting of India. Needless to say, with India looking for ways to undermine such confidence, the potential for an inadvertent escalation of hostilities to dangerous levels is clear.

A second problem, which experts have increasingly emphasized in the Pakistan case, has to do with the fact that, given Islamabad's reliance on the threat of limited uses of nuclear weapons to deter any Indian conventional offensive, such a posture is necessarily dependent for its credibility on a set of command and control systems that pose serious stability risks. As one scholar has put it, the primary problem with the emphasis on tactical use of nuclear weapons is that such weapons are 'less amenable to central command and control—the decision to use them has to be delegated early on to obviate the risk of communication failures'. This means that local commanders will possess the authority to decide on nuclear use in a geographical context where the distinction between tactical and strategic weapons is blurred by the short distances involved.³¹ The possibilities for miscalculation and inadvertent escalation, were the two states to be in a crisis situation, are therefore huge.³²

The command and control issues associated with a delegative system assume even greater importance given the unique pathologies of civil-military relations in Pakistan, and the role of non-state actors in the country's grand strategy. With the Pakistan Army still dominant in the nuclear realm, despite the seeming durability of civilian government in the country recently, the military's historical

²⁹ Narang, 'Posturing for peace', p. 39.

³º 'Pak's Hatf-9 missile aimed at India's Cold Start doctrine: analysts', Indian Express, 20 April 2011, http://www.indianexpress.com/news/paks-hatf9-missile-aimed-at-indias-cold/778736/, accessed 8 Nov. 2015.

³¹ Rajesh Basrur, 'South Asia: tactical nuclear weapons and strategic risk', RSIS Commentaries, Singapore, 27 April 2011, https://www.rsis.edu.sg/rsis-publication/rsis/1537-south-asia-tactical-nuclear-w/#.VY2g]mB-Befg, accessed 8 Nov. 2015.

^{32 &#}x27;Pakistan builds low yield nuclear capability', Dawn, 15 May 2011, http://www.dawn.com/2011/05/15/pakistan-builds-low-yield-nuclear-capability-concern-grows.html, accessed 8 Nov. 2015.

propensity for revisionism and risk-taking poses dangers for stability in a nuclear context.³³ Civilian leaders' attempts to enter the nuclear policy arena have continually been stonewalled by the military. For instance, it has been reported that former President Asif Ali Zardari's call for the adoption of a 'no-first-use' policy in 2011 was rejected by the then army chief General Ashfaq Parvez Kayani.³⁴ Given this institutional context, which might systematically bias doctrinal thinking in the direction of nuclear risk taking and use, the kinds of command and control problems identified above face the possibility of being ignored or underplayed by the Pakistani state.

A related problem with Pakistan's loose command and control structure involves the possibility of inadvertent and unauthorized use of its weapons. While Pakistan, as a new nuclear state, faces the obvious challenge of protecting its facilities from internal and external threats, such threats are greatly exacerbated by the country's internal political situation. Given fears of increasing radicalization or 'Talibanization' in the Pakistani body politic—including its military and scientific establishments—ensuring the reliability of commanders to whom nuclear weapons might be delegated is a major concern. A more indirect risk involves the transfer of crude weapons by rogue or radicalized elements within the military—scientific establishment into the hands of terrorists. ³⁵ All such risks, of course, are magnified within a delegative and dispersed command and control structure, as exists in Pakistan, and naturally become more extreme in crisis situations when nuclear assets have to be rapidly dispersed, thereby further degrading centralized control. ³⁶

Pakistan's ambitious grand strategy and tumultuous domestic politics are therefore central elements in the problem of nuclear stability in the region. A mismatch between the grand strategic tasks for which nuclear weapons were initially pursued—the only task for which they are truly useful from a stability perspective—and the present overly ambitious agenda for which these weapons have been repurposed, explains the risks and challenges that Pakistan's nuclear doctrine and posture pose to the region. A tendency on the part of the Pakistani elite to use any possible instrument to gain a tactical advantage in the zero-sum conflict with its larger neighbour suggests that nuclear weapons are yet to be recognized as very different instruments from more conventional ones for conducting brinkmanship policies. These are basic grand strategic and doctrinal issues that Pakistan must resolve if it intends the effects of nuclear weapons on the subcontinent to be largely stabilizing. As one author puts it:

³³ Hoyt, 'Pakistani nuclear doctrine'. On the problems associated with a garrison state and its proclivity for offensive actions, see T. V. Paul, The warrior state: Pakistan in the contemporary world (New York: Oxford University Press, 2014). See also Peter R. Lavoy, ed., Asymmetric warfare in south Asia: the causes and consequences of the Kargil conflict (Cambridge: Cambridge University Press, 2009); Gen. V. P. Malik, Kargil: from surprise to victory (New Delhi: HarperCollins, 2006).

^{34 &#}x27;Kayani does not back Zardari's "no-first-use" nuclear policy: WikiLeaks', Times of India, 6 May 2011, http://timesofindia.indiatimes.com/world/pakistan/Kayani-doesnt-back-Zardaris-no-first-use-nuclear-policy-WikiLeaks/articleshow/8179491.cms, accessed 8 Nov. 2015.

³⁵ On this, see Chaim Braun and Christopher F. Chyba, 'Proliferation rings: new challenges to the nonproliferation regime', *International Security* 29: 2, Fall 2004, pp. 5–49.

³⁶ Narang, 'Posturing for peace', p. 73.

The next crisis in South Asia will play out in the context of a greater disparity in conventional capability in India's favour and a greater disparity in nuclear capability in Pakistan's favour—hardly a good equation for deterrence and crisis stability. Crisis prevention is therefore critical.³⁷

Pakistan's nuclear doctrine, unfortunately, appears to have no answer to this sort of dilemma.

Finding stability in nuclear south Asia

As things stand currently, and as trends seem to indicate, both the Indian and Pakistani nuclear (and related conventional) weapons doctrines and postures are moving in directions that promise to multiply the nuclear stability risks that already confront the subcontinent. The big question facing strategists and policy-makers in the region therefore involves identifying what actions and doctrinal changes each side can initiate to create a more stable nuclear context in the region, and how practicable such changes are, given the factors discussed above. These are the questions addressed in this section of the article.

India

In many ways, correcting for the stability issues posed by India is the easier challenge to address. This is primarily owing to the fact that, as discussed above, the problematic aspects of India's nuclear posture have less to do with the underlying goals animating nuclear weapons possession and related technological operationalization, and more to do with the drift in doctrine and policy that has come about in response to the complex challenges posed by Pakistan. Such drift and decentralization have in practice led to bureaucratic politics—for instance, the organizational interests of the DRDO—driving India's posture away from the basic foundational principles of the country's stated nuclear doctrine.

In India's case, then, the solution lies in a revisiting of the basic purposes of the country's nuclear weapons and a reassertion of the minimal nature of its deterrence doctrine and posture. This means avoiding getting sucked into a posture that goes beyond India's stated doctrinal goals through either a quantitative expansion of the nuclear weapons arsenal or a qualitative one through the acquisition of MIRVs, tactical nuclear weapons or a BMD programme. It also means the excision of all elements of the doctrine that remain ambiguous and for the most part incredible, for instance the commitment to massive retaliation, especially in response to any and all chemical and biological weapons attacks.

These changes are both responsible and reasonably practical. They are practical because none of the shifts that have moved India away from a pure minimal deterrent posture promise anything of substance in security terms, certainly not to the extent where the trade-off between stability and risk is reasonably acceptable.

³⁷ Michael Krepon, 'South Asia's many crises', Dawn, 20 April 2011, http://www.dawn.com/news/622290/south-asias-many-crises, accessed 12 Nov. 2015.

That MIRVs, tactical weapons or a BMD programme will truly resolve the kinds of challenges India faces—particularly *vis-à-vis* Pakistan—is highly questionable, especially given the technological barriers involved in actually successfully implementing such programmes and giving credibility to the strategic purposes they are intended to serve. The conventional response envisaged in Cold Start is faced with similar, albeit lesser, logistical barriers that make it a problematic and hardly credible response to the challenges posed by Pakistan, at least at the present. Moreover, given the logical difficulty in the south Asian context of India credibly communicating to Pakistan that a punitive attack is a limited one as opposed to one aimed at dismembering Pakistan, it creates its own instability dynamics.

With their practical utility in doubt, the fact that the recent changes in India's posture have fuelled Pakistan's paranoia about Indian intentions is clearly counterproductive from an Indian perspective. Pakistan's fears, to the extent that they motivate the kind of developments in Pakistan that threaten to further destabilize the nuclear dynamic, also threaten to drag India into a situation rife with the possibility of risky escalatory spirals, accidents, miscalculations and unauthorized use. From a practical perspective, therefore, it clearly makes sense for India to refrain from changes in its conventional and nuclear posture that add little to the resolution of security challenges that the country faces, while contributing to a regional nuclear dynamic that is increasingly unstable and risky. A recommitment to minimum deterrence therefore makes eminent sense from both an Indian and a regional security perspective.

None of this, to be clear, implies that Pakistan's doctrinal choices are motivated by Indian actions alone, or that Indian restraint will necessarily translate into more moderation in Pakistan. Islamabad, as we have seen, has been driven to a large extent by its own independent logic in making its posture choices. Nor does it imply that the challenges posed by Pakistan's asymmetric tactics are a negligible or irresolvable security concern for New Delhi. What we do argue, however, is that the security challenges India faces clearly need to be addressed in ways that are effective and at the same time pose minimal danger of escalating nuclear dangers in the subcontinent.

Changes in India's conventional and nuclear posture away from minimal deterrent principles have done little to resolve India's security dilemmas while encouraging Pakistan to move towards an increasingly risk-prone posture of its own. In this context, a recommitment to minimum deterrence is required. Furthermore, a focus on defence and deterrence by denial is the wisest strategy in countering the Pakistan threat—both in its practical value and in its limitation of any worsening of the destabilizing trends currently in evidence in the subcontinent. Pakistan-based actors, for the most part, already find it difficult to execute major terrorist attacks on Indian territory. Upgrading India's defence and intelligence capabilities—and India's state capacity in general—to counter the kind of threats posed from Pakistan offers the most promising means of restraining Pakistan in the long term, by convincing the latter that breeding radical elements has diminishing prospects of hurting India while it risks exacerbating Pakistan's own internal

troubles. Such a posture has the additional benefit of not contributing to an escalatory spiral in the region or providing Pakistan with reasons and excuses to pursue an increasingly destabilizing and dangerous nuclear posture. In short, India is a status quo power, and a doctrine and posture that reflect that is likely to serve India's security interests best.

Pakistan

While resolving India's doctrinal issues is a relatively manageable task, the same cannot be said in the case of Pakistan. Even if India were to scrap the sorts of plans—such as Cold Start and BMD—that most concern Pakistan, there is little to suggest that the substance of the latter's nuclear doctrine and posture will be transformed in any fundamental sense. This has to do in part with the tyranny of structural conditions. As the conventionally inferior party in the rivalry, and one with existential fears, Pakistan has always required a doctrinal stance that is more prone to risk and instability. A policy of first use, for instance, is logically necessary given the massive advantages India exercises—and will continue to exercise—in conventional military terms. Even some level of reliance on tactical weapons might be seen as necessary to forestall the fear of India resorting to salami-style tactics to dismember Pakistan.

The more serious barrier, of course, as discussed above, lies in the Pakistani state's overambitious agenda for its nuclear weapons, which includes the pursuit of territorial revisionist goals under the cover of its nuclear capability. It is these goals that lie at the root of the increasingly destabilizing tendencies in the subcontinental nuclear context. Given this, a serious move towards nuclear stability on the subcontinent ideally requires a reassessment by Pakistan of its revisionist goals, or at least of the resort to the cover of nuclear weapons for their pursuit.

Such a drastic reappraisal is, of course, far from a simple matter. In addition to the fact that such asymmetric means—facilitated by the possession of nuclear weapons—are viewed as the only way for a conventionally weak power to achieve some revisionist goals, the fact that India has found no way of effectively responding to such provocations has also arguably led to perceptions in Islamabad that there is potential for success in such a strategy.³⁸ Even more importantly, the ideological underpinnings of territorial revisionism in Pakistan—with its origins in the two-nation theory—are perhaps too difficult to shake off, and certainly problematic in a political milieu of dominance by a military whose very ideological raison d'être many have argued is dependent on the India threat and the demands of territorial revisionism.³⁹

Doctrinal transformation therefore faces far more significant barriers in Pakistan than in India. Nevertheless, some amount of moderation could be facilitated by strong signals of Indian restraint accompanied by some recognition in Islamabad

³⁸ Narang, 'Posturing for peace?'.

³⁹ See Paul, The warrior state; C. Christine Fair, Fighting to the end: the Pakistan army's way of war (New York: Oxford University Press, 2014).

of a few practical facts. First, a minimal deterrent with first use has great merit to it, and addresses Pakistan's primary concern—the potential of an existential threat from a stronger India—while anything beyond this is made necessary only by more expansive goals being assigned to nuclear weapons. Second, and more significantly, while asymmetric strategies have not elicited an effective response from India, they have also proved of limited utility in achieving Pakistan's broader goals. While a few limited strikes on India are far from likely to meet Islamabad's revisionist aims—in Kashmir for instance—the long-term costs in terms of the spread of religious radicalism within the Pakistani body politic may be significant enough to lead to the realization that the pursuit of asymmetric warfare is misguided. And finally, the reliance on tactical nuclear weapons has created its own set of dangers for both Pakistan and regional stability, especially given the dangers of delegation in the domestic political context of radicalism.

In short, a move towards greater stability in the case of Pakistan requires a more fundamental reassessment of the very goals the country is pursuing, in contrast to the case of India, where for the most part the means rather than the goals are at issue. Such a shift is naturally much more problematic, and the prospects of its happening are fairly low. Nevertheless, as pointed out here, there are practical reasons why the Pakistani leadership ought to conclude that the adoption of an increasingly destabilizing nuclear doctrine and posture is not only dangerous from a regional stability perspective, but also detrimental to Pakistan's own security concerns.

Conclusions

Both India and Pakistan are in the early stages of nuclear learning. They have increasingly ambiguous and/or ambitious nuclear doctrines, and face major challenges arising from instability on both internal and transnational fronts. Their nuclear doctrines seem to be adding to the mixture of security problems south Asia faces. Although confidence-building mechanisms and dialogues are useful in helping to avert miscalculated escalations and military adventurism, the political and military elites in both countries need to reduce their predilection for high-risk behaviour and temper their expectations as to what purposes nuclear weapons can actually serve as instruments of security.

Nuclear doctrines in south Asia are further complicated by the trilateral nature of relationships involving India, China and Pakistan. Thus the Indian nuclear doctrine has to take into account China's doctrine and deployment policies, which in turn affect the way Pakistan formulates its doctrine. Stability is more problematic in this environment, given the strong military relationship between Pakistan and China and the concerns it generates in India. This suggests that the south Asian states need to bring China into the nuclear confidence-building conversation, and ideally into an arms control regime that involves the three principal parties. Even a tacit understanding among the three states could go a long way towards establishing strategic stability in the region.

Mahesh Shankar and T. V. Paul

The role of non-state actors in complicating the deterrent relationship also needs to be recognized, and Pakistan especially has a major responsibility to counter the prospects of unauthorized or terrorist use of nuclear and other WMDs emanating from its soil. Most importantly, however, both states urgently need to resolve the contradictions, ambiguities and destabilizing potential in their own nuclear doctrines and postures. Until that happens, the complexity of south Asian deterrent relationships is likely to remain at a higher level than in most other regions of the world today.