

External and Domestic Drivers of Nuclear Trilemma in Southern Asia: China, India, and Pakistan

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Abstract

This paper discusses both the external and domestic drivers of the nuclear trilemma in Southern Asia that involves China, India, and Pakistan. It seeks to untangle the complexity of the dyad and triangular nature of the relationships between the three countries and highlights major differences as well as similarities in the nuclear dynamics. It identifies and examines the internal dynamics of the China-India and India-Pakistan conflicts and explores how domestic drivers such as nationalism, public opinions, and civil-military relations either mitigate or exacerbate nuclear risks in a region marked by perennial disputes, emerging rivalry, and long-standing extra-regional interferences. Against these backgrounds, the paper addresses the central theme of the nuclear trilemma between China, India, and Pakistan by looking at causes of instability, risks of conflicts and escalation to nuclear use, and prospects of restraints and risk reduction, including the development and implementation of confidence-building measures and nuclear risk reduction mechanisms.

Keywords:

China; India; Pakistan; domestic drivers; nuclear chain; risk reduction

Introduction

Southern Asia, along with the Taiwan Strait, the Korean Peninsula, and the South China Sea, is considered one of Asia's most dangerous hot spots where unresolved territorial disputes, perennial conflicts, and military faceoffs raise serious concerns over risks of escalation of a nuclear nature, given that the three antagonists—China, India, and Pakistan—are all declared nuclear weapons states.¹ In fact, Southern Asia presents a geopolitical complexity that makes managing nuclear risks both imperative and challenging. While there are two dyads of conflicts, between China and India, and between India and Pakistan, both intra-regional and extra-regional security complexes make bilateral approaches to conflict management, if not entirely futile, at least inadequate as China provides significant all-round support to Pakistan whereas India has in recent years expanded its growing strategic ties with the United States and, to some extent, with Japan and Australia as well. Indeed, when discussing emerging nuclear challenges, Southern Asia can no longer be viewed as just a geographic construct; it has increasingly become a geopolitical frame of reference.

This paper seeks to untangle the complexity of the dyad and triangular nature of the relationships between China, India, and Pakistan. It identifies and examines the internal dynamics of the China–India and India–Pakistan conflicts and explains how the regional triangle cannot be properly examined without also evaluating the role of the United States in what is gradually emerging as great-power competition for influence and primacy in the Indian Ocean. Against these backgrounds, the paper will address the central theme of the nuclear trilemma between China, India, and Pakistan by looking at causes of instability, risks of conflicts and escalation to nuclear use, and prospects of restraints and risk reduction, including the development and implementation of confidence-building measures and nuclear risk reduction mechanisms.

I argue that in the Southern Asian context, unresolved territorial disputes, asymmetry in capabilities, changing security alignments, and emerging strategic rivalries define inter-state relations and present a complex geostrategic lens through which to understand and analyse nuclear challenges. Equally important, some of the domestic drivers of what can be seen as the Southern Asian trilemma, from rising nationalism, public opinions, to civil-military relations and command and control structures, also provide incentives and impose constraints on the three countries' nuclear policies. The two conflict dyads—China–India and India–Pakistan—are driven by different domestic dynamics, present different levels of intensity, and are managed in different manners. Beijing and New Delhi have until recently, with the exception of the 1962 war, by and large contained their territorial disputes along the nearly 3,500-km un-demarcated boundary from spilling over into other aspects of the bilateral relationship.²

¹ However, only China, but not India and Pakistan, is recognised as a nuclear weapon state as per the Treaty of the Nonproliferation of Nuclear Weapons (NPT).

² There is a huge trove of literature on China-India relations. For some of the more recent works, see Bajpai (2020); Paul (2018); Gokhale (2021a); Suryanarayana (2021).

Meanwhile, New Delhi and Islamabad have been entangled in perennial conflicts ever since the partition in 1947, and have allowed, and indeed exploited their fundamental disputes over the status of Jammu and Kashmir to essentially strangle any attempts to bring normalcy into the bilateral relationship (Paul 2005; Ganguly 2002; 2016). While both China and India have made significant progress in military and nuclear modernisation over the past two decades, even their latest border clashes in Ladakh in 2020, perhaps the most lethal conflict in 45 years, has barely raised the spectre of nuclear escalation. However, since 1998, every major conflict between India and Pakistan has stoked fear of nuclear escalation (Dalton and Zhao 2020; Kapur 2010).

However, the drivers for nuclear modernisation, and the circumstances under which nuclear weapons could be used, are not confined entirely to the intra-regional dynamics. Indeed, ever since—or even prior to—the 1998 nuclear tests whereby both India and Pakistan became de facto nuclear weapons states (Sagan 2009), the United States, China and, to a less extent, Russia, have indirectly impacted the evolving nuclear landscape in Southern Asia. One unique characteristic has been the ‘strategic chain’, or cascading effect, where actions by one actor can trigger reactions from a second actor that in turn affect the third actor (Einhorn and Sidhu 2017). In this context, while primarily a direct response to perceived and real US threats to its national interests, Chinese nuclear and non-nuclear military developments affect India’s assessment and calculation as it has to take into account both China and Pakistan in its strategic planning. Likewise, an India that seeks to maintain credible minimum deterrence vis-à-vis China accrues nuclear capabilities that seriously undermine Pakistan’s nuclear deterrence, prompting the latter to expand both the size and types of its nuclear arsenal. The strategic chain has yet to be broken (Saalman and Topychkanov 2021a).

Sino-Indian Relations and the Emerging Nuclear Dimension

Sino-Indian relations can both be cast in civilisational terms and captured in geopolitical realities (Sen 2017; Sidhu and Yuan 2003). Bilateral ties today can be characterised as both cooperative (e.g., climate change, BRICS, WTO) and competitive (e.g., maritime South Asia, the Indo-Pacific, global nuclear order) (Leveringhaus and de Estrada 2018). Since the late 1950s, territorial disputes have remained the most serious sticking point in bilateral relations, a major impediment toward normalisation. The two countries fought a war in 1962 over the disputed territories, but since the late 1980s have more or less managed to develop other aspects of the bilateral relationship, including trade and investment, while engaging in border negotiations at various levels for over three decades. However, little progress has been made toward resolving the border disputes. In recent years, both countries have been improving the infrastructure on their respective side of the Line of Actual Control (LAC) allowing them to respond to contingencies more rapidly (Jakhar 2020). Given their different interpretations of even where exactly the LAC is aligned, each side has also been building camps and establishing patrol positions in what it considers to be well within its side of the LAC, but which is often contested by the other (Hassan 2021; Rajagopalan 2021). As a result, it is not surprising that recent years have witnessed multiple instances of clashes near their LAC, with the two most dangerous standoffs in June-August 2017 in Doklam, the tri-junction border area between Bhutan, China and India, and in

Ladakh in June 2020, including the Galwan Valley, Hot Springs-Gogra and Demchok, and around Pangong Lake, resulting in dozens of casualties on both sides (International Institute for Strategic Studies 2021, 162-163; Davis 2021, 104-106).

Apart from territorial disputes, China has a long-standing all-weather relationship with Pakistan and a growing Chinese presence in maritime South Asia where, through investments and expanding trade ties, Beijing is making significant inroads and increasing its influence into what New Delhi considers to be its backyard (Pal 2021). India is clearly alerted to this gradual change of balance of influence in the region and has responded by strengthening its traditional ties with the neighbouring countries. At the same time, the Modi government has turned what used to be the more moderate 'Look East' intention into more concrete 'Act East' policy where India has developed broader contacts with ASEAN countries, Vietnam and Singapore in particular. In addition, India has also joined the Quadrilateral Security Dialogue (the Quad) that includes Australia, Japan and the United States (Jaishankar 2019; Pant and Mattoo 2021).

There are multiple domestic drivers of the China-India conflicts. These include rising nationalism in both countries; the continuing build-up of conventional and nuclear capabilities; and strongmen leadership in Beijing and New Delhi. Nationalism is rising in both countries as the two Asian powers have emerged as important players on the world stage. This has been fed on by the media, public opinions, and often exploited by leaders for domestic political reasons, either to galvanize populist support for electoral purposes, or to promote nationalist agendas in the international arena. Not surprisingly, both China and India in recent years have hardened their unyielding positions on what are considered vital national interests (Manson 2010; Shi 2020). It also so happens that Xi Jinping and Modi ascended to top leadership positions at approximately the same time and both have made it their missions to pursue great-power status (Myers et al. 2020; Gokhale 2021b). Beijing has pursued a more assertive foreign policy, contesting regional primacy against the United States and expanding its power and influence in the periphery, including Southeast and Southern Asia and in particular where territorial disputes with other countries are concerned (Gill 2022; Chhabra 2021). New Delhi, on the other hand, has adopted a more nationalist agenda under Modi, to rebrand India as a swing power with democratic credentials (Debroy, Mohan and Tellis 2022; Hall 2019). Their growing ambitions and expanding reach inevitably bring the two in closer encounters, in the Indian Ocean and the Asia-Pacific region (Congressional Research Service 2018). As a consequence, the competitive aspects of Sino-Indian relations have moved beyond the territorial dispute and China-Pakistan nexus.

The recent clash in Ladakh and the growing fortification on both sides of the LAC, from deployment of troops to infrastructure construction, have raised concerns about future reoccurrences of similar incidents escalating to full-flared military confrontation. Some analysts speculate whether such escalation could result in nuclear exchanges between the two (Basrur 2020). However, others point to the fact that at no time did either China or India even hint at nuclear threat as a reassuring sign of nuclear restraint that other parties in similar conflicts should emulate (Thakur and Sethi 2020). As pointed out by two analysts: 'One of the most interesting puzzles of that relationship is why nuclear weapons, which both possess, have not played a more important role' (Dalton and Zhao 2020, 1). At least three

factors are at play here. First is the no-first-use (NFU) policy upheld by both China and India. Nuclear weapons for both countries serve primarily for deterrence rather than war-fighting purposes. Second is the strict central control of nuclear weapons in China and India, which significantly lowers the risk of unauthorised use. The third factor is that while territorial disputes have remained a long-standing unresolved issue between the two countries, and indeed in recent years such disputes have become much more tense and open, neither China nor India considers them posing any serious existential threats to each other's survival (Kurita 2018; Boehlefeld 2020).

China and India are the only two of the nine declared nuclear weapons states that have adopted a nuclear NFU policy. Beijing's NFU position was announced the day China conducted its first nuclear test in 1964 and has been reiterated numerous times since in official documents. New Delhi's reference to NFU, on the other hand, has been ambivalent and remains in draft form (State Council Information office of the People's Republic of China 2019; NSAB 1999). Both have committed to not use nuclear weapons first against non-nuclear weapons states (NNWS). Both have maintained relatively small nuclear arsenals. For their respective nuclear doctrine, India has adopted credible minimum deterrence while China has striven for assured retaliation (Fravel and Medeiros 2010; Khan 2017). Whereas China's NFU appears unconditional—at least in its official stipulation—and extends also to NNWS in nuclear weapons free zones (NWFZs), India's NFU pledge applies only to those NNWS not allied to nuclear weapons powers. Further, India retains the option of nuclear use in response to chemical and biological attacks against it (Sundaram and Ramana 2018; Pan 2018).

While the recent China–India border conflicts have started some serious albeit still limited discussion of nuclear risks in future escalation, a strategic chain or nuclear cascade has already existed in Sino–Indian relations. China's nuclear modernisation in the past two decades has clearly been driven by the need to retain the credibility of its capacity to retaliate against nuclear attacks and to respond to developments that undermine it, from missile defences to the deployment of conventional global prompt strike with long-range precision missiles (Zhao 2021; Kristensen and Korda 2021). These include: (a) How to determine and respond to incoming strikes due to growing conventional-nuclear entanglement. This has become an important issue between the United States and China, with the latter being concerned with the survivability of its relatively small nuclear arsenal and could explain its intention to expand its current nuclear forces (Acton 2020; Wu 2020). (b) The impacts of missile defences on their second-strike capabilities and hence deterrence credibility, and on strategic stability in Southern Asia (Powell 2003; Anjum 2016). (c) Space, AI and cyber factors affecting and related to early warning and command and control systems, and the proper controls over the use of nuclear weapons (Egeli 2021; Johnson 2021). (d) Increased pressure and compressed time during crises for decision-making that could create a 'use or lose' dilemma, which is also drawing greater attention to the China–India nuclear relationship given their long-standing border disputes and in particular in the aftermath of their recent clash at the Galwan Valley (Sasikumar 2019; Dalton and Zhao 2020).

China's ongoing nuclear modernisation has also been driven by domestic considerations. One is the need to meet as well as to inspire the country's growing nationalism, which in

turn is fanned by the 'China Dream' and the rejuvenation of the country. Important domestic stakeholders such as the defence scientist community and the military, have been strong supporters seeking to expand both the size and the sophistication of China's nuclear arsenal (Smith and Bolt 2021; Heginbotham, Heim, and Twomey 2019). In comparison, India's responses to China's nuclear build-up have been driven by national security considerations and have important domestic drivers as well, primarily in the development of the country's nuclear arsenal. Nationalism, partisan politics, elite perspectives and leadership styles have had major impacts on India's nuclear doctrine and force developments (Maltotra 2015; Rajagopalan 2022). Meanwhile, while public opinions and strong nationalist rhetoric at times advocate nuclear threats, nuclear use remains under strict civilian control and the government often demonstrates a significant degree of restraint (Joshi 2022).

Despite these developments, a sense of misplaced complacency appears to explain the absence of serious bilateral discussion of strategic stability and nuclear risk prevention between Beijing and New Delhi. It has been suggested that China's nuclear modernisation and enhanced capabilities are not directed at India, but rather the necessary responses to US actions that threaten to neutralise China's limited nuclear deterrence (Fang 2013, chapter 1; Cunningham and Medcalf 2011). Indeed, 'in China, there is no established narrative, let alone debate, about India's nuclear weapons and the implications for Chinese security. Few Chinese nuclear experts even think about nuclear issues in Southern Asia' (Dalton and Zhao 2020, 4). Of the growing literature on Sino-Indian relations by Chinese scholars, few engage in any serious analysis of the nuclear issue. This is largely because first, from Beijing's perspective, India's development of the nuclear capabilities, while clearly driven by its concern over the China threat, remains primarily as deterrence. Second, the few Chinese analysts who write on India's nuclear strategy recognise New Delhi's NFU policy. And third, while recognising India's ambitions and unresolved territorial disputes, few Chinese analyses would consider them as posing serious existential threats to each other's security (Zhang 2014). Such an attitude ignores that fact that "actions taken with regard to one country might have unintended second- or third-order effects on other countries in the chain" (Einhorn and Sidhu 2017, 14). In other words, China's expansion of its nuclear arsenal, especially where it makes significant advancement in developing and deploying more accurate counter-force, or asymmetrical intelligence gathering capacity, would pose serious threats to India's ability to maintain credible nuclear deterrence, while development and deployment of largely defence-oriented missile interception capability by India will influence Pakistan's calculation and hence its nuclear weapons programmes (Tellis 2022, 250-251). With the recent user-trial test of the 5,000-km Agni-V, India has demonstrated its capacity to cover the entire spectrum of the Chinese territory, and hence further enhanced its credible minimum deterrence (Raghuvanshi 2021; AFP 2021). However, it is interesting to note that the Indian ministry of defence also asserts that this is in line with its commitment to 'No First Use', even though recent comments by high-ranking Indian officials have raised questions about this commitment, given the challenges New Delhi faces in managing its security relationships with both China and Pakistan (Saalman 2020).

India–Pakistan Conflicts: The China Factor in the Security Trilemma

India–Pakistan conflicts are as old as when they became independent countries in 1947. Three and a half wars have been fought over the period of seven and a half decades. The contentious issue has always been the status of the Principality of Kashmir, divided by the line of control (LoC) and separately administered by Pakistan and India (Khan 2022). While the two countries fought three wars in 1947, 1965, and 1971, since 1998 when both India and Pakistan acquired nuclear weapons, each and every major crisis, from Kargil of 1999, the terrorist attacks on the Indian Parliament in late 2001, to the 2008 Mumbai attack and, most recently, the February 2019 attack on a convey carrying Indian Central Reserve Police Force personnel, killing 40, has raised fear of escalation to a nuclear exchange (Krepon and Dowling 2018; Ganguly and Hagerty 2005). The intractable conflicts between India and Pakistan over the Kashmir issue have been driven by fundamentally different understandings of the issue and diametrically opposed solutions. The Pakistan-supported insurgency in India-administered Kashmir has been countered by massive deployment of Indian security, paramilitary and regular forces to maintain control and crush militants.³

India has adopted—albeit never officially confirmed—the so-called ‘Cold Start’ doctrine in response to Pakistan-sponsored low-level insurgency across the LoC into India-administered Jammu and Kashmir. A doctrine supposedly designed as a better and more effective, swift and proportionate response to Pakistan-instigated provocations, including punitive incursions into Pakistani territory, it is a radical departure from its predominantly defensive posture since independence. India’s adoption of the new doctrine has led to Pakistan’s development and deployment of tactical nuclear weapons for battlefield use, to stall progress of Indian troops, and due to its relative inferiority in conventional capabilities compared to its more powerful rival (Ladwig III 2007/08; Sriram 2016).

Military standoffs and often low-intensity clashes along the LoC have been regular occurrences as they are deadly. One of the questions often discussed is whether the introduction of nuclear weapons into the subcontinent has stabilised the security environment as neither India nor Pakistan wants to risk a nuclear war, or has exacerbated the nuclear risk as a result of deeply entrenched hostility, distrust, and misperceptions (Davis 2011). During the 2019 Pulwama crisis, both India and Pakistan engaged in deterrence signalling. While New Delhi and Islamabad alternated between veiled threats and provocation on the one hand, and displayed restraints on the other, there were significant concerns at the time that misperceptions and misunderstanding could have resulted in unintended escalation. The fact that a nuclear precipice was avoided may be largely due to the existence deterrence between the two countries (Bowen and Gill 2021).

In August 2019, India revoked the special status of Jammu and Kashmir and brought them under the central government as two separate union territories (Srivastava 2019). The controversial move was driven by the growing Hindu nationalism since the BJP took power in 2014 and four months after Modi won re-election with a BJP majority in parliament (Aiyar Tillin 2020; Ming 2019). The reactions from Pakistan were swift and anticipated.

³ For discussion of recent developments, see International Institute for Strategic Studies (2021).

Even Beijing, for years trying to maintain a neutral stand on the Kashmir issue, expressed its concern, as the newly created Union Territory of Ladakh also includes the Aksai Chin, even though New Delhi maintained nothing had changed, with “no implication for either the external boundaries of India or the Line of Actual Control (LAC) with China” (Press Trust of India 2019; Choudhury 2019; India Today 2019). All the same, China requested the convening of a special closed-door meeting on the Kashmir crisis on 6 August 2019, the first time in 50 years that the issue was placed on the UNSC agenda (International Institute for Strategic Studies 2021, 272). The China–Pakistan nexus was on display.

The Sino–Pakistan relationship has long been characterised in Beijing and Islamabad as ‘all-weather’, ‘deeper than ocean and sweeter than honey’, one that has stood the change of times. Granted, this is a unique relationship initiated in the 1960s by a deep common strategic interest—their shared adversity toward India (Vertzberger 1983; Singh 2007). The end of the Cold War and the normalisation of Sino–Indian relations have led Beijing to adopt a more balanced approach to, and with an equal distance between, the two South Asian nemeses. Chinese interests have shifted from viewing Pakistan as a major asset in Sino–Indian strategic rivalry to a stable, secure, and reliable neighbour in a strategically important region (Small 2016; Small 2015). Increasingly, Beijing’s objectives are to seek Islamabad’s assistance in stemming extreme ethnic separatist and terrorist elements posing a threat to China’s north-western region and Chinese personnel working in Pakistan (Haider 2005); to develop Pakistan’s infrastructure such as the Gwadar Port and the China–Pakistan Economic Corridor (CPEC); and to maintain defence and security cooperation with its ally, especially the military, while trying to assuage India’s concerns and suspicions (Wolf 2020).

Beijing’s policy toward Pakistan has been informed by at least three important considerations. First is the need to maintain a solid, pragmatic and flexible relationship with Islamabad. Solid in the sense that China must remain a true and trustworthy friend of Pakistan and is also reflected in the extensive defence cooperation between the two countries. Pragmatic and flexible mean that Beijing will not meet blindly Islamabad’s demands, especially where China’s own interests and its relationship with India are concerned. However, for deep strategic reasons, Pakistan’s value as a counterweight to India remains relevant to China (Miller 2022). The second consideration relates to the Indo–Pakistani territorial dispute, and most prominently, the positions Beijing adopts on the Kashmir issue largely sympathetic toward Islamabad, notwithstanding its declared stance on the issue having shifted over the years from supporting Pakistan to maintaining neutrality. At the same time, China has become increasingly concerned that unmitigated crises over Kashmir carry seriously risks of escalation to nuclear war between India and Pakistan (Chang 2017; Kurita 2022). The third is Pakistan’s role in assisting Beijing to stem ethnic and terrorist activities in Xinjiang on the one hand, and its place in China’s BRI with the CPEC, the flagship project with over \$27 billion (of pledged \$64 billion) already invested in infrastructure development such as roads and railway, power plants, and ports (Allaudinn and Ahmed 2020; Kumar 2007).

China’s reluctance to get directly involved militarily in Pakistan’s conflicts with India is compensated for by Beijing’s persistent and willing support of Pakistan’s defence capabilities over the years. At the same time, as China re-orientes its foreign and security

policy in the post-Cold War era, with a focus on East Asia and a possible military conflict with the United States over the Taiwan Strait during the 2000s, it has growing interests in seeing a stable South Asia and a better relationship with India. Chinese policy toward Kashmir began to be grounded in the belief that the only realistic way to resolve the Kashmir conflict is through peaceful negotiation between India and Pakistan and, as Islamabad's trusted friend, Beijing could and should use its influence to convince why it is in Pakistan's interest also to resolve the issue peacefully (Sun and Haegeland 2018).

The ties between Chinese and Pakistani militaries remain strong, from cooperation in developing new fighter aircraft, to joint military exercise. Pakistan's military has always played a critical role in the country's national security policymaking and maintaining close ties with the PLA is essential for Rawalpindi (Shah 2014). In China, while the Communist Party exercises control over the military, Beijing recognises and assigns the PLA an important role in bilateral relations. Chinese assistance to Pakistan's nuclear and missile programmes has been well documented (Boon and Ong forthcoming). Pakistan is China's largest recipient of arms sales. Between 2008 and 2018, it purchased more than \$6.4 billion worth of weapons. In 2015, Beijing announced its largest arms deal with Pakistan, the sale of eight *Yuan*-class submarines worth \$5 billion (China Power Team 2020; Ansari 2015). China and Pakistan are co-developing the JF-17 fighter aircraft, and China is providing Pakistan with sophisticated optical tracking system for its missiles and is building Type 054AP frigate for its closest ally (Zhao 2019).

Pakistan has adopted a nuclear doctrine of what is termed 'full-spectrum deterrence' (FSD), which requires a nuclear force of sufficient size with a variety of nuclear weapons and delivery means, including tactical nuclear weapons, that are capable of striking a range of Indian targets, from countervalue to counterforce, in order to strengthen its deterrent against an enemy of superior conventional and presumably, nuclear capabilities (Abdullah 2018; Khan 2015). Pakistan has never publicly proclaimed that it has a no-first-use policy, nor has it indicated that it will not use nuclear weapons first. However, given the growing asymmetry in Indian–Pakistani conventional capabilities, Pakistan has continued to expand its nuclear arsenals to compensate for this military imbalance (Wueger 2019; Tasleem 2016). In this context, there is a close analogy to what has been described as the escalate to de-escalate posture in conflicts. However, there are significant difficulties in anticipating the impact of escalate to de-escalate in South Asia, in an India–Pakistan faceoff, due to different perceptions of stakes and values involved if such a strategy is deployed. One fallacy could be 'mirror imaging' where the initiating actor thinks the other side is likely to back down because the stakes are not high enough to justify the costs associated with the next level of conflict (Montgomery and Edelman 2015). Unlike India, where nuclear use is under strict civilian control, the nature of civil-military relations in Pakistan in effect gives the military significant power over both operational controls and decisions on nuclear use, or, as suggested by Vipin Narang, "Pakistan's nuclear command-and-control architecture and decision making occurs within a clearly praetorian structure" (Narang 2014).

As applied in the example of Pakistan, escalate to de-escalate could be said to factor into its posture of full spectrum deterrence with the introduction of short-range, nuclear-capable missiles and enhanced conventional deterrence capabilities (Ahmed 2020; Tasleem 2016). In the South Asian context, Pakistan's asymmetric escalation posture, including nuclear first

use, to compensate for its conventional—and nuclear—inferiority vis-à-vis India is premised on assuming that New Delhi would refrain from further escalation for fear it may lead to nuclear exchanges at the strategic level, especially when the stakes are not high enough to justify all-out military responses to Pakistani provocations (Narang 2009/10). In comparison, in a hypothetical US-Russia scenario, Russia's resort to the escalate to de-escalate posture is to both demonstrate resolve and to achieve limited objectives before further escalation of the conflict, whereas the US doctrine is more about escalation dominance (Miles 2018; Lieber and Press 2006).

Beyond the China-India-Pakistan Nuclear Trilemma

Southern Asia presents what Buzan and Wæver characterise as a 'regional security complex' where intra-regional security dynamics are affected by the linkage to, and interventions from, extra-regional powers (Buzan and Wæver 2003; Choudhury 2019). While the India-Pakistan conflicts over Kashmir have been a fixture for over seven decades, the China-India territorial disputes have been equally long-standing, if not as intensive and dangerous. However, given the power and military capabilities of the latter dyad, any major escalation would have more serious consequences. However, this regional triangle, while a misnomer given the asymmetrical power of the three states, is increasingly inadequate in explaining and anticipating the security dynamics in what is now broadly viewed as Southern Asia. The United States has always sought to project its power to the subcontinent, during the Cold War, and after 9/11, given its growing interest in a region of growing strategic salience (Manda 2019; Manuel 2016).

A strategic chain is clearly at play here with regard to nuclear modernisation of China, India, and Pakistan even though the strategic motivations, doctrinal considerations, resources, and compositions and sizes of their respective arsenals are different and asymmetrical. However, that does not easily translate to nuclear risks in a same linear way. One silver lining, despite the continuous nuclear modernisation of all three states, is that until now, none of them has regarded and planned nuclear use primarily from a military, war-fighting perspective; rather, nuclear weapons remain the last resort and are predominantly of political considerations (Tellis 2022). There are ways to manage their conflicts and good reasons that all three should refrain from behaviours that could result in nuclear escalation. To begin with, China's nuclear modernisation efforts are intended to enhance the survivability and effectiveness of its strategic nuclear forces, thereby increasing the credibility of Chinese nuclear deterrence and ensuring assured retaliation (Cunningham and Fravel 2015). The technological efforts have focused on the areas of propellant technology, mobility, guidance and accuracy, yield-to-payload ratio, and launch preparation time. China's growing albeit still relatively small nuclear arsenal supports its strategy of minimum deterrence, but lacks the accuracy, survivability, size, and C3I (command, control, communications and intelligence) systems necessary for a limited deterrence doctrine. Moreover, there are significant deficiencies in China's nuclear triad compared to US and Russian strategic forces that call into question the effectiveness of China's nuclear deterrent, especially against an adversary with missile defenses (Wu 2020).

The recent media revelation on three fields of more than two hundred missile silos under construction and the latest Pentagon annual report on China's military power assessing a potential spike in Chinese nuclear weapons up to 1,000 by 2030, have attracted much attention from analysts and policymakers alike (Brimelow 2020; Department of Defense 2022). These developments represent a major departure from China's heretofore 'lean and effective' posture with a small nuclear arsenal. The projected increases will have serious implications not only for the United States, but also for its allies and security partners, including India (Cunningham and Fravel 2021; Sevastopulo 2021; Das 2021). Indeed, India will have to respond to improvement and expansion of Chinese nuclear arsenal, even though the latter has been driven by, and is targeted at, the United States. Nonetheless, improvements and expansion of China's nuclear arsenal will affect India's decisions on its nuclear weapons programme. Similarly, India's responses to China inevitably pose serious threats to Pakistan, which also has to act. For New Delhi, it is difficult to develop a nuclear capability that would be sufficient deterrence against China without at the same time appearing to undermine Pakistan's minimum deterrence. Breaking the strategic chain in terms of threat perceptions and risk calculations, if not the physical buildup, would go a long way to assuring India and, subsequently, Pakistan.

Serious strategic dialogues should be the first step. For years, Washington has sought to initiate a dialogue with Beijing on nuclear-weapons issues, but with little progress thus far. Part of the reason concerns the equivocal US attitude toward accepting mutual vulnerability in bilateral nuclear relations and its refusal to adopt NFU; for its part, China, as the weaker party and influenced by a strategic culture that emphasises secrecy, surprise, and is suspicious of transparency demands, would resist intrusive verification (Perkovich 2022). In fact, China has never declared or confirmed the exact number of nuclear weapons it possesses and deploys, nor its stockpile of weapons-grade fissile materials. This appeared to be changing gradually in the final years of the Obama administration, with multiple track-1.5 meetings between US and Chinese interlocutors, including defense officials from both countries as well as arms control analysts in attendance and engaged in a widening range of increasingly more open and honest discussions on critical nuclear issues (Glosny, Twomey, and Jacobs 2014; Adler 1992). The November 2021 Biden–Xi virtual meeting reportedly brought up the prospect of US–China nuclear arms control, even though there was no official confirmation from either Beijing or Washington. Russia's invasion of Ukraine and Moscow's loose talk about nuclear use, has provided the impetus for Washington to reassess its own nuclear posture, including in its latest review direct reference to the possibility that the United States will "face two major nuclear powers as strategic competitors and potential adversaries" (US Department of Defence 2022, 4). This assessment will greatly influence US policies regarding strategic nuclear arms control, nuclear deterrence and nuclear force level.

This in turn would influence Beijing's strategic calculation, including continued buildup of its nuclear arsenal. Given the growing tensions between the two powers in the Western Pacific and in particular the Taiwan Strait, it is imperative that they engage in serious dialogues to clarify their positions, avoid misunderstanding and miscalculation, and develop mechanisms for crisis management (Deng and Gale 2021; Sevastopulo and Mitchell 2021).

Clearly, while the US factor to some extent explains Chinese nuclear build-up, to better evaluate nuclear risks in Southern Asia, it must include China (Dalton 2021). It therefore needs also to move beyond the traditional framework to establish a new one, the trilemma or even a 'quadrilemma'. For decades, the discussion has been confined to India and Pakistan, with the inclusion of countries like the United States only as an occasional mediator. With the evolving geopolitics of Southern Asia, innovative approaches require additional involvement, including engagement of China as one of the key interlocutors. Reinvigorating transparency, dialogue, and confidence-building measures in Southern Asia should be the priority for policymakers in all three capitals (Haider and Azad 2021; Saalman and Topychkanov 2021b).

From the perspective of nuclear posture, NFU could point to one potential avenue for this framework to develop provided New Delhi clarifies its position in the nuclear doctrine. For China and India, moving beyond their NFU rhetoric towards establishment of a nuclear strategic dialogue and a de-targeting agreement could limit if not completely remove nuclear use in their conflicts (Haynes 2019). However, this would mean that Beijing publicly if not officially accepts India as a nuclear weapons state, which it remains reluctant to do. The incident at Galwan Valley in 2020 suggests some of the earlier bilateral understanding on the restrictions of firearms may have assisted in limiting the number of casualties and fatalities (Goldman 2020; Westcott 2021). Similarly, early nuclear discussions would help impose mutually agreed restraint and hence contribute to nuclear risk reduction. They would also assist in enhancing mutual understanding of both countries' nuclear postures to create the foundation for relevant protocols to prevent and reduce chances of unauthorised or inadvertent nuclear use (Dalton and Zhao 2020; Saalman 2012).

To better connect nuclear posture to practice, the new framework must also be responsive to such potential shifts as escalate to de-escalate and technological advances. While addressing these changes, it will be crucial for India and Pakistan to re-establish a degree of predictability. For instance, nuclear de-alerting and de-mating would extend the time needed for decisionmakers, thereby mitigating the 'use or lose' pressure (Sethi 2020). Policymakers in both countries must recognise that neither side is able to unilaterally change the status quo of the Kashmir issue to its favour without risking all-out military confrontation that could escalate to nuclear use, with unacceptable consequences for both sides. The Reagan–Gorbachev adage that "nuclear war cannot be won and therefore should not be fought" is particularly pertinent here. The Kashmir issue is only amenable to political rather than military solutions. Hence efforts must be made to manage risks in doctrinal, escalatory, unauthorised, and accidental nuclear use. There are specific steps that India and Pakistan and, for that matter, China in its nuclear relationship with India, can take. Reaffirming NFU by Beijing and New Delhi, and for all three to raise the thresholds of nuclear use and restrict the circumstances where nuclear weapons would be considered, could reduce doctrinal risk. Greater transparency and information exchanges, de-alerting, de-mating, de-targeting, increased decision time, could address the risk of escalatory nuclear use. Clear command-and-control structure, effective civilian control over nuclear use, and enhanced safeguards of nuclear weapons and related materials could help manage risks of unauthorised and accidental use (Wan 2020; van der Meer 2018).

A set of recommendations based on the discussions in this paper are as follows:

- Beijing and New Delhi should separately reconfirm NFU and resume high-level bilateral security dialogue, in addition to the regular Army Corp-level meetings. Given that China does not recognise India as a nuclear weapons state as per the NPT, direct official discussions on nuclear matters will not be feasible at the moment. This being the case, a more realistic approach would be to organise unofficial dialogues where nuclear strategists from China and India can explore issues such as nuclear risk reduction, de-targeting, implications of emerging and disruptive technologies on nuclear command and control and strategic stability, among others. These dialogues can be generic rather than (China and India) country-specific and in bilateral contexts so as to encourage fruitful conversations.
- India and Pakistan should reaffirm mutual refrain from attacking each other's nuclear facilities. In addition, the two countries should seek mutually recognisable and agreed reassurance measures to mitigate against military escalation and minimise misunderstanding during crises. Given that the two countries have signed numerous treaties, agreements, and confidence building measures over the years, it would be important to assess both their roles and limitations in contributing to conflict mitigation and maintenance of stability, and identify factors impeding their implementation and enforcement.
- For all three countries, there should be greater awareness of the potential challenges brought about by the advancement of technologies and development and strengthening of command-and-control mechanisms to prevent unauthorised and accidental use of nuclear weapons. China, India and Pakistan should start engaging, at the Track II level initially, in discussions of critical issues within the trilemma context, in particular those bearing on miscalculating of intent and risks of nuclear use. It is important to separate structural (military and nuclear developments; overall/shifting balance of power), perceptual (security interests and policy objectives), and communicative (misunderstanding) aspects to enable meaningful dialogues rather than talking past one another.
- The United States also needs to be brought into the dialogue as its relationships with China and India have significant impacts on strategic (mis)perceptions and (in)stability, in respect to security developments and nuclear risks. US-China engagement in strategic stability and mutual vulnerability could reduce Chinese incentives in vastly expanding its nuclear arsenal, which in turn lessens the pressure on India to pursue similar actions.

Conclusion

Southern Asia's evolving strategic landscape has refocused attention to the prospect of nuclear restraint and the risks of nuclear escalation amidst growing tensions between India and Pakistan on the one hand, and China and India on the other. At the same time, extra-regional strategic developments, most prominently the emerging US–China strategic rivalry, also affect the nuclear dynamics on the sub-continent. Together, they are eroding the doctrinal foundation of the no-first-use posture in both China and India, the former due to the growing US non-nuclear capabilities and threats they pose to China's limited nuclear arsenal, while the latter are a result of ambiguity and confusing interpretations by high-ranking Indian officials. Clearly, NFU cannot be sustained without broader endorsement by all nuclear weapons states and arms control agreement on strategic but non-nuclear capabilities. Escalation risks in nuclear use in the region exist because of the possibility of unauthorised use and may be encouraged by a false sense of confidence in the ability of escalation control and framed in a strategic myopia that could bring the region to the nuclear precipice. Finally, technological advances pose significant challenges to command and control, early warning, and could result in accidental nuclear use.

These developments present significant threats to the region's strategic stability. However, to date, serious dialogues at the official level are sporadic to non-existent. Existing confidence-building and security-reassuring measures have had mixed track records; some, such as the India–Pakistan Non-Attack Agreement and the 1993 and 1996 China–India agreements on military CBMs, have been largely complied with while others have largely failed to achieve their goals in the absence of compliance. Emerging nationalism, divergent threat perceptions, and intractable territorial disputes drive conflict dynamics and raise escalation risks, including nuclear confrontation.

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