The India-China Nuclear Dynamic: India's Options

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ABSTRACT The ongoing India-China face-off in Eastern Ladakh may appear to be a small-scale confrontation between conventional forces. But it is still one between nuclear-armed states, and the threat of escalation cannot be denied. In its wake, India has carried out a series of missile tests, while China too has fired a number of ballistic missiles near the Paracel and Spratly Islands, apparently to warn the US, but hardly something New Delhi can ignore. This analysis makes three key points: the threat from China is likely to persist; India needs to adapt balancing responses to the threat to the requirements of a nuclear weapons environment; and Indian policymakers should be mindful of the possibilities of actual military combat, be it a marginal war, or a trans-domain conflict that involves use of advanced technologies influencing both the nuclear and conventional spheres.

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THE NATURE OF THE THREAT

How serious is the threat from China? Will India-China tensions dissipate? This is unlikely, as the short-lived impact of the 'Wuhan reset' showed.[a] Neither a common historical experience nor shared economic interest has produced stability in their relations, let alone sustained camaraderie.

Over the centuries, India and China were tenuously connected by limited trade and sparse social contact, with military-political engagement constrained by the Himalayas. Following India's independence (1947) and China's socialist revolution (1949), there was a brief period of relative affinity between the two states, both of which were struggling to recover from colonial exploitation.[1] But differences over their border resulted in a rivalry that has endured since the late 1950s, and intensified recently.[2] The unfolding story is one of war (1962), violent military skirmishes (1967), and confrontation that brought the antagonists to the brink of war (1986-87).

For a time, it seemed that New Delhi and Beijing were agreed on setting aside the border dispute and building mutually beneficial economic relations.[b] By 2018, China seemed poised to become one of India's top ten sources of foreign investment.[3] Yet the relationship regressed owing to growing friction along the Line of Actual Control (LAC) separating the two militaries, which has seen repeated and gradually escalating confrontations.[4] The skirmishes eventually led to the Doklam crisis in 2017 and the current Ladakh episode, the latter causing fatalities for the first time in decades. What explains this deterioration and what should India do about it?

It has been argued that both Prime Minister Narendra Modi and President Xi Jinping are strong personalities and are prone, under pressure, to whip up

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[a]   Following the 2017 standoff between the Indian and Chinese armed forces at Doklam on the Bhutan-China border, Indian Prime Minister Narendra Modi and Chinese President Xi Jinping met in Wuhan in April 2018. Known as the 'Wuhan reset', this meeting was expected by many analysts to improve relations between the two countries. The standoff between them on the Ladakh border in May 2020, however, suggests the hope was premature. See, e.g. Antoine Levesques, "Wuhan Summit Edges India and China towards a New Strategic Understanding," International Institute for Strategic Studies, London, May 17, 2020, https://www.iiss.org/blogs/analysis/2018/05/wuhan-india-china-strategic; "Xi Makes Proposals on China-India Ties as Meeting with Modi Enters 2nd Day," *Xinhua*, October 13, 2019, http://www.xinhuanet.com/english/2019-10/13/c_138467153.htm. Also see Jabin T Jacob, "Modi-Xi 'Informal Summit': Hopes of a Big India-China Reset are Misplaced," *Business Standard*, November 29, 2019, https://www.business-standard.com/article/economy-policy/modi-xi-informal-summit-hopes-of-a-big-breakthrough-are-misplaced-118042500155_1.html; and M. K. Narayanan, "Making Sense of the Wuhan Reset," *Hindu*, May 21, 2020,https://www.thehindu.com/opinion/lead/making-sense-of-the-wuhan-reset/article23944124.ece,

[b]   Trade between the two countries grew from $188 million in 1992 to $90.15 billion in 2018 - International Monetary Fund, *Direction of Trade Statistics,* https://data.imf.org/regular.aspx?key=61013712.

nationalism.[5] This view, however, misses an important difference in their external worldviews. India since the early 1990s has been a moderate power disinclined to use force or to intervene in its neighbourhood.[c] Modi has continued the trend, except while responding to serious border threats from China and Pakistan. This is in line with Hindutva's historical foreign policy outlook, which is focused on defending the nation from threats to its sovereignty, but is otherwise relatively tolerant of differences with neighbours and broadly focused on projecting civilisational influence through ideational power.[6]

China, in contrast, has developed a more aggressive nationalism accompanied by a penchant for coercive action against its neighbours. For a while, it appeared set on a moderate path – encapsulated in the term "peaceful rise" introduced into the official lexicon in 2003[7] – keeping a low profile and displaying a relatively circumspect attitude toward its numerous disputes in South Asia, the East China Sea, and the South China Sea.[8] But that approach has been inconsistent at best. Since the late 1980s, China has also shown a tendency to use varying degrees of force against its adversaries.[9] Notably, it seized the disputed South China Sea atoll Mischief Reef (also claimed by the Philippines, Taiwan and Vietnam) in 1995, and subsequently ignored the Permanent Court of Arbitration's

2016 ruling in favour of the Philippines. Its recent actions include occupying and building military facilities on several of the Spratly islands – a *fait accompli* approach which the US and regional states have not been able to counter.[10] The same tactic appears to have been adopted by the People's Liberation Army (PLA) in Doklam, and now in Ladakh.[11] Barring an unexpected change in its trajectory, Beijing's recurring military pro-activism is likely to remain a threat.

China's proclivity for coercion reflects a deep-seated and growing insecurity in its elite. For all his effort at projecting himself as an undisputed strongman, Xi's actions display an anxiety that reflects the weak foundations of his power. A strong leadership must rest on two vital attributes of its people: a sense of belonging to the nation, and participation in it.[12] The state constructed by the Chinese Communist Party (CCP) depends heavily on the former, which is cultivated by fostering nationalist sentiment and highlighting adversarial relationships. It is nurtured by bringing economic growth and its benefits to the populace. But the CCP offers little real participation to the citizen since the apparatus and principles of democracy in China's authoritarian system are shallow. The CCP also faces significant difficulties owing to the slowdown in China's growth, due partly to American economic pressure,

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c   To be sure, it had done so periodically earlier during the Cold War era; for instance, through military intervention in Pakistan in 1971 and in Sri Lanka in 1987.

but also to internal inefficiencies, a global slowdown, and China's changing demographic make-up.[13] The Chinese leadership has thus become increasingly dependent on stirring up nationalism as ballast for its domestic position, placing inordinate stress on the need to overcome past humiliations and "rejuvenate" China.[14]

For India, it is important not to underestimate China's preoccupation with its own vulnerability. Though China and Pakistan appear to be different, they are alike in important respects. Both are driven by a deep sense of internal fragility and ruled by elites which, lacking strong foundations, seek to build national solidarity and regime strength through adversarial relationships with other states.

China is thus unlikely to undertake a negotiated compromise with India except on a tactical basis. Indian foreign policy thinking, which has often tended to underestimate the threat from China, needs to be hard-headed. Any effort by Beijing to negotiate a deal is likely to go the way of the "Wuhan reset." How then should India respond?

"BALANCING" IN A NUCLEAR ENVIRONMENT

Historically, states perceiving a threat have resorted to balancing an adversary's power. This has two components: internal balancing, or the building of material power internally to deter or defeat the enemy; and external balancing, or joining hands with other states experiencing the same threat from a common foe. In a nuclear weapons context, the need for balancing on both counts is modified.

Internal Balancing

In a nuclear environment, it is not necessary to balance an adversary by acquiring an approximately equal measure of power. A modicum of nuclear capability is sufficient to deter an enemy that may possess weapons systems apparently superior in quality and quantity. Historically, in every case of military confrontation between nuclear-armed states, the balance of capabilities has *not* been a determinant of the outcome, be it the Cuban missile crisis of 1962 or the China-Soviet Union clash of 1969.[d] The history of nuclear

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d   At the time of the Cuban crisis, the US had more than seven times as many warheads as the erstwhile Soviet Union. Yet it agreed to a deal whereby it withdrew its missiles from Turkey in exchange for Moscow removing its missiles from Cuba. See Benoît Pelopidas, "We All Lost the 'Cuban Missile Crisis'," in *The Cuban Missile Crisis: A Critical Reappraisal* (Abingdon and New York: Routledge, 2015) ed. Len Scott and R. Gerald Hughes, pp. 172-173. Similarly, China held off the Soviet Union in their border clashes in 1969 despite an even wider disparity: Chinese warheads at the time were a minuscule 0.47 percent of those in the Soviet arsenal. The ratio of warheads is calculated from Robert S. Norris and Hans M. Kristensen, "Global Nuclear Inventories, 1945-2013," *Bulletin of the Atomic Scientists*, 69(2013): 78.

weapons shows that deterrence *always* works at a minimal level. This has profound implications for policy.

In responding to the Chinese threat, it is important for India not to fall into the trap of trying to bolster its nuclear capabilities, which are already sufficient to deter China since Indian missiles can target major Chinese cities. For instance, the Agni-II can hit large Chinese cities such as Chengdu (population: over 10 million) and Chongqing (8.5 million), which, as pragmatic Chinese experts acknowledge, "has the same (deterrence) effect (on China) as being able to reach Beijing."[15] Ironically, betraying the same misunderstanding that prevails among some of their Indian counterparts, many Chinese nuclear specialists tend to dismiss India's arsenal as insufficient to pose a serious threat to their country, and hold that China's arsenal is designed to deter the United States.[16] This interpretation is self-contradictory. India's warhead capacity is estimated to be about 150, or 46.87 percent of China's 320. In contrast, China's warheads constitute a mere 5.52 percent of the United States' 5,800 warheads.[17] The incongruity in the thinking of these Chinese experts appears to reflect what one critic has called their "confidence, verging on arrogance".[18] That said, India's capacity to deter China is not affected by what the Chinese say, but by how they *behave* during crises. There is no evidence that China is not deterred by India's smaller nuclear arsenal.

The bottom line is that the drumming up of the China threat should not lead policymakers to acquiesce to pressure from Indian strategic thinkers calling for enhanced nuclear capability. More and "better" weapons do not produce more and better deterrence. However, investment in increased capability does have one positive consequence. Nuclear weapons have a powerful symbolic value. It is doubtful if Washington would have seen India as a serious partner had it not formally gone nuclear in 1998. The acquisition of a substantial nuclear arsenal will likely strengthen India's strategic relations with the US and other major and minor powers because of its effect on India's image as a military power. It will also encourage China to take India more seriously as a strategic player and to re-evaluate the incipient instability of their relationship. Indian policymakers should consider this critical distinction between the military and political benefits from nuclear weapons which shapes the trade-off between the gains and costs of weapons acquisition on a substantial scale.

The issue of command and control-related failure is critical, especially during a crisis, and even more so when nuclear signalling has taken place in the form of verbal statements, deployment of nuclear-capable dual-use weaponry, or missile tests. Nuclear rivals have occasionally come within a hair's breadth of nuclear war. In 1983, for example, Soviet forces received a false warning that five American missiles had been launched and a retaliatory strike was only averted by the decision of a single officer, who suspected (correctly, as it turned out) that incoming information

may not have been accurate.[19] The malfunctioning of warning systems and other complications relating to nuclear weapons can produce sudden escalation, especially during crises of the kinds that have occurred at Doklam and in Ladakh. For policymakers, then, the real concern is not whether one has enough hardware, but how well the command and control system connecting the hardware works.

External Balancing

Historically, external balancing has involved the building of alliances against common threats. India's growing defence cooperation with the US and Japan and the revival of the Quadrilateral Security Dialogue or "Quad", which includes Australia, have sometimes been viewed as a shift toward the formation of alliances.[20] But the age of alliance-making is over.[21] There are no new ones since the end of the Cold War and the North Atlantic Treaty Organization (NATO) – the only major alliance that still soldiers on – is an uneasy hangover from yesteryear.[22] The new and ubiquitous phenomenon of "strategic partnerships" is more limited in character.[23] India's strategic partnerships, particularly the bilateral ones, do have a balancing function to the extent that they involve arms transfers (in India's case, non-nuclear only), logistics cooperation, and intelligence sharing. Beyond that, they are largely symbolic. "Inter-operability" through military exercises and technical protocols may *imply* but does not mean joint war planning and/or joint operations.

There are four considerations that drive a nuclear-armed nation's strategic partnerships. First, a nuclear power does not need alliances since it can deter adversaries, even strong ones, by itself. Second, a nuclear power does not want to be dragged into the military confrontations of partners against other nuclear powers. In this respect, partnerships provide more plasticity than alliances. Third, strategic partnerships offer flexibility: there is room for political adjustment with an adversary without the need to obtain consent from strategic partners. And fourth, strategic partnerships preserve autonomy of decision-making and keep pressures from a strong partner at bay. Therefore, there is no need for India to enter into anything resembling a military alliance to deter China.

What balancing gains can India offer others threatened by China? On the nuclear side, it could be extended deterrence. This has not received attention in the literature on India-China relations, yet, in a sense, it already exists in practice. The January 2003 iteration of Indian nuclear doctrine clearly stated that India would employ nuclear weapons "in retaliation against a nuclear attack on Indian territory or *on Indian forces anywhere*."[24] In the 2017 Doklam crisis, which occurred on the Bhutan-China border, Bhutan, which was being defended by Indian troops, was implicitly brought under the umbrella of extended deterrence. India now needs to consider, in consultation with Bhutan, whether this limited form of extended deterrence, thus far applicable

only to Indian troops, should be expanded and formalised.

MILITARY ACTION IN THE NUCLEAR CONTEXT

The truism that nuclear weapons make major war rationally unthinkable does not take into account the so-called "stability-instability paradox," which makes marginal armed combat between conventional forces possible.[25] Two analytically distinct types of non-nuclear combat are possible under the nuclear overhang: marginal conventional combat and trans-domain high-technology combat.[26]

Marginal Combat

As seen from the fatalities in the Ladakh encounter, significant military engagement between India and China is very much possible. Though nuclear weapons powers try and avoid major war, they do engage in occasional marginal conventional combat. The essential rule of military engagement between nuclear powers is to stop two thresholds short of nuclear conflict, which means, first, not crossing the conventional-nuclear divide, which is relatively clear, and second, staying on the safer side of the threshold between marginal conflict and major war, a line which is vague at best. This 'two-threshold rule' limits the objectives and scale of conflict. This is better than defining 'war' by a completely arbitrary standard of the minimum number of fatalities, most commonly 1,000 deaths altogether, which was popularised by the Correlates of War Project.[27] Cases where

the fighting came close to crossing the threshold but eventually did not, include the Sino-Soviet border clashes of 1969,[28] and the Kargil conflict between India and Pakistan[29] in 1999.

What kinds of conventional combat are possible between nuclear-armed states? A review of nuclear rivalries reveals a number of possibilities:

● *Clashes between land forces* have occurred on an appreciable scale in the Sino-Soviet and Kargil conflicts; sporadically and on a very limited scale between India and China in 1967, though with increasing frequency from the early 2000s; and regularly on a limited scale – shelling, employment of small arms, occasional commando-type raids – between India and Pakistan.

● *Engagement between air forces* has occurred, for instance, between North Korean MiG-15s manned by Soviet pilots and American warplanes during the Korean War; between Chinese and American aircraft during the Vietnam War; and between Indian and Pakistani warplanes during the Balakot episode in February 2019.

● *Air-land combat* has occurred on several occasions. American surveillance aircraft were shot down twice by Soviet forces: over the Soviet Union in 1960 and during the Cuban missile crisis in 1962; anti-aircraft batteries manned by the Chinese military targeted American warplanes during the Vietnam War; and Indian

aircraft targeted Pakistani ground forces in the Kargil conflict.

- *Conflict at sea* has been less in evidence, but one prominent incident occurred during the American naval blockade of Cuba in 1962, when the US Navy used practice depth charges against Soviet submarines, nearly setting off a war because two submarine commanders assumed an attack had been launched and stopped just short of firing nuclear torpedoes.

This leads to four considerations for Indian policymakers. First, the possibility of low-level combat is always present, with the attendant risk of escalation. The naval incident in the Cuban missile crisis is a case in point.[e] Second, the Indian Army's much-debated 'Cold Start' strategy,[30] formulated with reference to the India-Pakistan border, applies to the India-China border as well, but in reverse. China has adopted a 'salami-slicing' approach in the Ladakh-area confrontation in 2020, aimed at improving bargaining power, which must be anticipated and countered. Third, though India-China confrontation has been predominantly land-based, the possibility of conflict at sea needs to be taken seriously. Tension between the two navies has been growing substantially.[31] Red lines are far more fluid at sea than on land, which encourages provocative naval actions

such as shadowing and stalking that can result in confrontations and conflict. And shore-to-ship communication systems can be disrupted, which could lead to combat. Fourth, the key to minimising risk lies in command and control systems. The false warnings mentioned earlier in the nuclear context can bring sudden and hard-to-control escalation in the conventional realm as well. There is a trade-off here: delegating decision-making authority can ensure rapid response to threats, but could permit local commanders to take initiatives that might lead to an escalating action-reaction process compounded by such factors as incomplete or false information, misinterpretation, and the personality traits of military commanders and civilian decision-makers.

Trans-Domain High-Technology Combat

Trans-domain weapons spanning the nuclear and conventional realms are complicating both nuclear deterrence and marginal conventional war.[32] Though there are several technologies involved, two aspects are particularly relevant. First, the advent of hypersonic delivery vehicles (HDVs) has begun to make military-strategic relationships more complex. China has been developing this technology, and so have the US and Russia.[33] India, with its successful test of a technology demonstrator in September 2020, is also in the race, but may take some time to

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e   Because there is a risk of rapid escalation, it is vital that policymakers take a much closer interest in military matters than has hitherto been the case instead of considering them to be the domain of the military - see Anit Mukherjee, *The Absent Dialogue: Politicians, Bureaucrats, and the Military in India* (New York: Oxford University Press, 2020).

build significant capacity. Since ballistic missiles already attain high speeds, HDVs are unlikely to strengthen deterrence against China. On the other hand, HDVs are destabilising because they are dual-use, making it difficult to distinguish between nuclear and conventional variants, as well as being hard to track.[34] Even as conventional weapons, they have the potential – especially if positioned close to the border – to undermine stability because of their speed and detection-avoiding capability, which reduces decision times for responding to real or false warnings. Besides, as conventionally armed vehicles, HDVs also have the capacity to strike nuclear assets, including command and control systems. It is critical that these considerations be borne in mind while attempting to deter China or to prevail in marginal conflict.

Cyber warfare technology is another trans-domain capability that is spreading rapidly.[35] India's nuclear weapons-related systems should be ready to respond to cyber threats.[36] The challenge this technology poses is severe, owing to the uncertainties and complexities associated with it.[f] Cyber technology can strengthen as well as weaken nuclear deterrence and conventional capability. On the positive side, it can improve testing, warning systems and communications; on the negative, it can enhance the location and targeting of undersea and mobile land-based weapons platforms for the enemy.[37] Apart from calling for improved cyber capabilities, those fearing a decline in retaliatory capacity arising from Chinese advances in cyber war technology are also likely to press for larger and more diverse nuclear arsenals to counter the threat of a first strike, but the essential principle of minimum deterrence remains. China can hardly be confident of wiping out India's nuclear arsenal, or even a substantial portion of it, in one blow without facing a substantial risk of retaliation.

A number of possible negative consequences of a rising Chinese cyber threat should be anticipated. First, Indian nuclear and conventional assets – and even civilian targets – are already under threat from Chinese attacks, and these are likely to increase. Second, the uncertainty posed to Indian warning systems, including the appearance of deliberately induced or accidental "false positives," is likely to encourage a shift away from the current non-deployed posture towards an alert or possibly launch-on-warning posture for nuclear weapons, and more rapid response at the conventional level. This could trigger mirror responses from China and Pakistan

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f   As one analyst notes, "cyber attacks generally obscure the identity of the attackers, can be initiated from outside of or within the defender's state territory, are frequently transmitted through third parties without their complicity or knowledge, and can sometimes be repeated almost indefinitely by skilled attackers, even against agile defenders." - Stephen J. Cimbala, *The United States, Russia and Nuclear Peace* (Cham: Palgrave Macmillan, 2020): 157.

and raise the strategic temperature. Third, the cyber threat, because of its potential to undermine assured retaliation by disrupting command and control, raises questions about the efficacy of No First Use (NFU), a plank of Indian nuclear doctrine. India needs to consider whether NFU is worth persisting with in the context of trans-domain threats. Fourth, blurring of the distinction between nuclear and conventional weapons (especially with respect to warning systems) tends to erode the two-thresholds rule and facilitate escalation during a crisis. And fifth, the compressed time frame combined with uncertainty may increase dependence on artificial intelligence-based systems to reduce this vulnerability, thereby generating its own complications such as loss of control over decision making.[38]

Taken together, the new technologies raise serious difficulties for all hostile strategic relationships between nuclear powers by potentially collapsing decision-making time, blurring the distinction between nuclear and conventional weapons, and inducing reliance on non-human thinking systems, which themselves are subject to what Charles Perrow calls "normal accidents", which are intrinsic to complex systems.[39] From a policy perspective, two critical aspects need to be considered. First, stability requires discussing the issues and risks involved with adversaries. Communicating these risks to a Chinese leadership preoccupied with catching up with the US will be difficult. However, growing India-US defence cooperation may gradually facilitate a more realistic

Chinese reorientation. Second, and of more immediate concern, is the need to develop capability in the new technologies, especially in the cyber realm, as a deterrent against a growing cyber power like China. Despite occupying a strong position in information technology, there are significant gaps in India's cyber security preparedness, which makes it vulnerable to crippling attacks. India's position in the *National Cyber Power Index 2020* is 21st of 30 nations assessed, while China is in second place.[40] And China is known to be a major source of cyber attacks on Indian targets. Without the capability to retaliate, India will be exposed to a spectrum of cyber attacks that could neutralise and wreak havoc on its command and control systems.

CONCLUSION

The India-China military relationship carries a number of complexities. First, the Ladakh confrontation represents the end of military restraint, and future episodes of fatal violence are on the cards. Second, the firewall between the nuclear and conventional domains, never solid, is being corroded by new technologies. This places unprecedented demands on command and control systems as well as on the balance between delegation and risk. Third, the military and political realms of decision-making are becoming increasingly integrated, not least because of the problem of time compression in crises. This requires both civilian and military officials to engage with each other's concerns better, and to think about the organisational implications of this integration in peacetime as well as

in crises. Fourth, the rising threat from China calls for a careful response that enhances India's capacities, especially in trans-domain technologies, but also resists pressure for embracing changes in nuclear and conventional capability that could increase risks without strengthening deterrence. Fifth, while nuclear and conventional arms underlie the security and survival of the state and society, they can effectively be nullified by non-traditional warfare unleashed by cyber technology.

Ideally, a dialogue that helps stabilise the India-China military-strategic relationship should be initiated. This is not easy, as China is already reluctant to enter into arms control negotiations with the US and Russia. It is also too anxious to focus on pursuing its status as a challenger to American dominance to sit at the nuclear negotiating table with an India it considers below its status. It may do so only in the aftermath of a massive crisis, as has been the case with other nuclear rivals. Meanwhile, India would do well to be prepared. ⊙RF

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