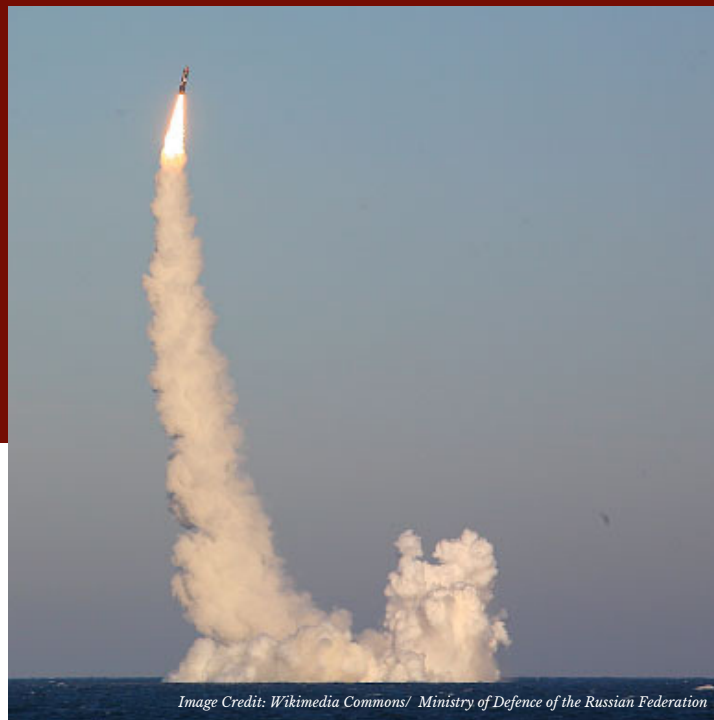


Chasing Mirages: India, China and Nuclear Deterrence

By Rajesh Basrur

India's **advances in nuclear capability**, proceeding at a canter, include a steady buildup of warheads (190, according to a recent estimate), the production of missiles with longer ranges, and apparent moves to shift from non-deployed to deployed warheads. Two technologies that stand out are the acquisition of submarine-launched ballistic missiles (SLBMs) and the development of multiple independently targetable re-entry vehicles (MIRVs) or ballistic missiles that can carry multiple warheads, each able to strike a separate target. What drives the quest for these capabilities?

Historically, Indian nuclear insecurities have been **preoccupied with Pakistan**, but China has been a major concern in relation to these two technologies. SLBMs, for instance, have little additional deterrence value in relation to Pakistan, which is a neighbour. China, however, presents a different challenge. It is a much larger and militarily sophisticated power with its political centre, Beijing, located far from the disputed frontier. Though Pakistan is an immediate concern because of its revanchism over Kashmir, **China is considered a long-term threat** and much of India's efforts to bolster its deterrence capabilities is aimed at countering it.



While considerable attention has focused on the acquisition of technologies, comparatively little attention has been devoted to questioning the strategic logic behind this pursuit, especially the potential benefits and costs associated with these technologies. Debate within India remains limited, partly reflecting the relatively modest attention that nuclear issues receive within the Indian strategic community.

Drawbacks of the New Technologies

The primary advantage of possessing SLBMs is widely said to be that they confer an “assured second-strike capability,” enabling India to strike back if it is subject to a surprise attack. Because nuclear submarines are very hard to track, they are thought to be less vulnerable to a sudden strike compared to land-based and air-based launchers (the latter are normally based on land).

Against this, there are a number of drawbacks associated with SLBMs. First,

even if communications between submerged submarines and command centres are generally reliable, cyber-attacks or equipment failure could disrupt the chain of command and lead to an unintended launch. Second, the maritime domain complicates the signalling and interpretation of red lines. Unlike land borders, the sea lacks clear boundaries. Submarines may therefore threaten an adversary by operating in close proximity to its territory. Third, submarine tracking technology is becoming increasingly sophisticated, which undercuts the notion that the sea leg of deterrence is immune to surprise attack.

Similarly, MIRVed systems offer both putative advantages and risks. On the plus side, a MIRVed missile keeps costs down as a single delivery vehicle enables a state to strike at multiple targets. An Indian **Agni-V MIRVed missile is said to have the capacity to carry four to five warheads**, which would mean a substantial reduction in costs and a greater probability of striking targets even if some proportion are inaccurate. In addition, a MIRVed missile would enable India to increase the probability of evading Chinese missile defence systems.

On the negative side, a MIRVed missile can intensify competitive pressures. Because an adversary cannot accurately determine the number of warheads a missile carries, uncertainty about relative capabilities is likely to grow. Such uncertainty will likely produce an arms-racing dynamic involving both offensive and defensive systems. MIRVs also pose escalation risks during a crisis. A single missile launch, whether

intentional or accidental, may be perceived as significantly more threatening if it involves a MIRVed system, increasing the likelihood of a rapid escalatory spiral.

The Competitive Cascade

Ironically, while India's attention regarding these technologies is focused primarily on China, **the latter is looking elsewhere – towards the United States**. Beijing does not perceive **India as a peer nuclear competitor**. Its self-image is that of an established great power, in contrast to India, whose economic and military capabilities remain significantly smaller. But the two are linked in a **strategic chain** that extends from the United States to Pakistan. China, competing with the United States, has abandoned its adherence to minimum deterrence and embarked on a **major nuclear buildup** from about 2019 that has produced a wide range of weapons systems and an expanding arsenal expected to grow from some 600 warheads in 2024 to about 1,000 in 2030.

India, while seeing China as its biggest long-term threat, has been relatively cautious in its nuclear strategy. There is little expression of an urgent need to compete with China and build a bigger arsenal or alter India's strategic posture. The main focus of policy makers has been on developing the two technologies discussed above, along with a moderate pace of capability growth in terms of longer-range missiles, hypersonic vehicles, and missile defence. In this sense, India's departure from its former minimalist doctrine has been less dramatic than that of China. Nevertheless, a clear departure from earlier practice is evident. Why is this so?

The Epistemological Trap

The bottom line is that the concept of nuclear deterrence is at best ambiguous. The concept emerged from World War II, where the gap between the actual damage caused by large-scale conventional destruction (as in the firebombing of Dresden and Tokyo) and nuclear damage (Hiroshima and Nagasaki) was relatively small.

Consequently, the advent of nuclear weapons did not transform strategic thinking as fundamentally as might have been expected. On one hand, it quickly became a hallowed principle that nuclear war must never be fought (a revolutionary perspective), but on the other, deterrence remained rooted in a loose notion of balance of power, which shaped thinking about how many and what kinds of weapons would be required (an evolutionary perspective).

While India and China initially embraced minimalistic approaches to deterrence, both have increasingly adopted concepts associated with Cold War strategic thinking. This shift is evident in the language of deterrence adopted by both countries. Terms such as “credibility,” “vulnerability,” and “second-strike capability,” which have always been central to American doctrine, have become embedded in their doctrinal discourse as the chief drivers of expansionary nuclear strategy.

Ultimately, every technological solution introduces new risks alongside new capabilities. To the extent that states believe greater technical sophistication enhances the credibility and durability of deterrence,

it can reinforce restraint and stability. In this respect, the real balance is psychological. However, uncertainties associated with both SLBMs and MIRVed systems can also generate new escalation risks, potentially undermining that stability.

The evidence before us is that less sophisticated capabilities deter effectively, which North Korea has demonstrated vis-à-vis the United States. Why, then, are increasingly advanced capabilities often viewed as desirable? Orthodox nuclear strategy has long assumed that deterrence rests on the balance of capabilities, a premise inherited from the Cold War. Both China and India have fallen into the epistemological trap of allowing conventionalised thinking about nuclear weapons to shape their nuclear modernisation programmes. This perception of deterrence facilitates the quest to attain an ever-receding mirage about deterrence adequacy: a Cold War lesson that has yet to be properly learned.

Rajesh Basrur is an independent scholar based in Mumbai, India; and is an Adjunct Professor with Griffith Asia Institute, Griffith University, Brisbane. Previously, he taught at the S. Rajaratnam School of International Studies, Nanyang Technological University, Singapore, and at the University of Mumbai; and held numerous visiting positions at, among others, Stanford University, Sandia Laboratories, the Brookings Institution, and the University of Illinois at Urbana-Champaign. He has authored six books, including *Subcontinental Drift: Domestic*

Politics and India's Foreign Policy (Georgetown University Press, 2023); and Minimum Deterrence and India's Nuclear Security (Stanford University Press, 2006). He has also edited twelve books and journal special issues, including (with Anit Mukherjee and T. V. Paul), India-China Maritime Competition (Routledge, 2019); and Challenges to Democracy in India (Oxford University Press, 2009). He has published research papers in journals such as Defence Studies, India Review, International Affairs, International Politics and Journal of Peace Research.