

Only political intervention through mutual understanding, doctrinal prudence, and regulating the search for operational supremacy holds potential to escape the stranglehold of the action-reaction cycle

Sino-Indian Nuclear Dynamics

Taking the Global Lead

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Technology often seduces potential adversaries through a promise of relief from security threats only to deceive through the inevitable action-reaction cycle. In the universe of security, technology is contestable both by technology itself and by doctrinal prescriptions and operational countermeasures. The advantage provided by new technology is mostly ephemeral in that provides the momentum for an endless cycle that is best described as chasing one's own tail. Only political intervention through mutual understanding, doctrinal prudence, and regulating the search for operational supremacy holds potential to escape the stranglehold of the action-reaction cycle. The elusive search for Ballistic Missile Defense (BMD) is a prime example. This paper seeks to interrogate the role of the technology-security dynamics in the context of the Sino-Indian nuclear weapon relationship.

The context of the Sino-Indian nuclear weapon relationship is clouded by the enhancing reach of India's missiles¹, the evolving Chinese reaction to U.S. nuclear modernization accompanied by a shift in nuclear posture, and a shared belief in the role of nuclear weapons that is signified by No First Use (NFU) doctrine. The latter point represents political intervention while the two former signify the action-reaction cycle which

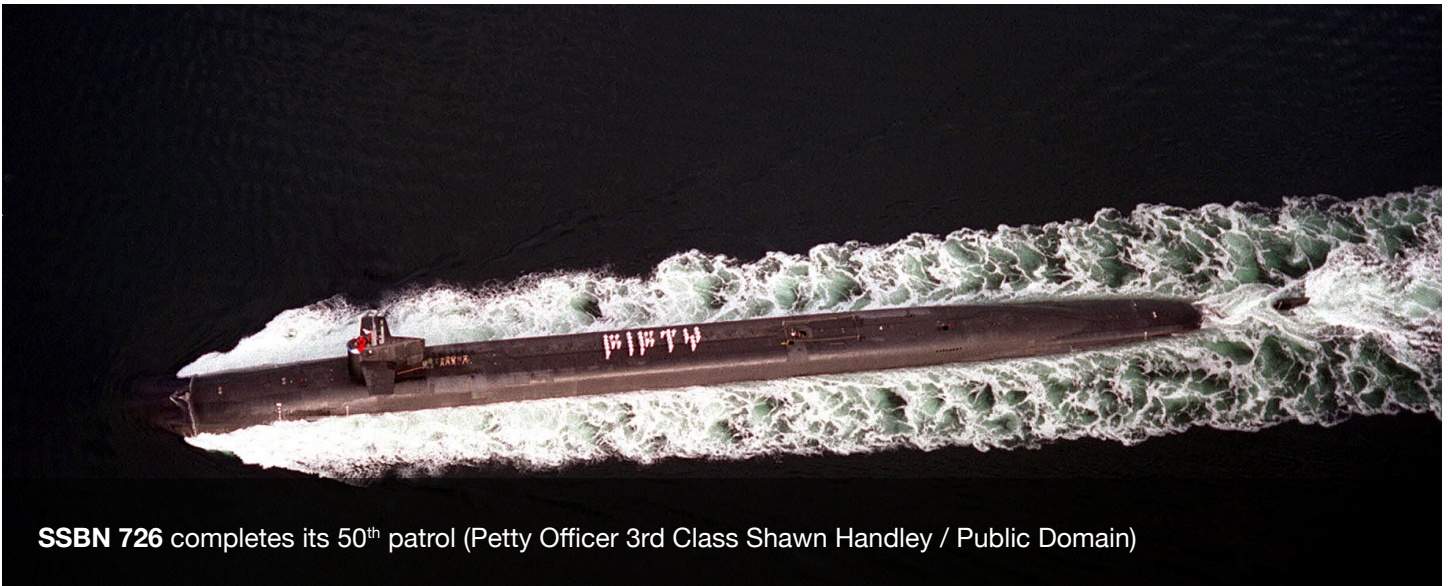
is primarily a product of technology. However, both China and India must contend with nuclear powers that espouse First Use. China in dealing with the United States and Russia who are quantitatively superior nuclear powers, while India deals with Pakistan whose claims of quantitative superiority are contested.

In technological terms, the rise of China and the U.S. reaction resulting in contemporary geopolitical flux at the global level has impacted the evolution of China's nuclear arsenal. The most prominent illustration of this is China's reaction to the United States' withdrawal from the Ballistic Missile Defense Treaty. Earlier China had eschewed development of BMD, but the United States' quest to create BMD has caused China to attempt to develop its own BMD system as well as systems that can overcome BMD like multiple independently targetable reentry vehicles (MIRVs) and Hyper Glide Vehicles (HGVs). Similarly, India has reacted to developments in China and Pakistan by launching an indigenous BMD development program.

The key question is whether the political embrace of the belief in the role of nuclear weapons that underpins China's and India's NFU posture restrains technological trajectory which in contemporary times is also



Beijing, China. DF-26 medium-range ballistic missile as seen after a military parade
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fashioned by cyber power, synthetic biology, artificial intelligence, and robotics, inter alia. Both countries emphasize the political nature of nuclear weapons and deride its war fighting potential. Neither believe in quantitative supremacy and hold dear the notion that survivability of a few weapons is enough for deterrence. These beliefs provide an explanation of the existing size of the arsenals of both countries which indicates that quantitative parity with adversaries is not on the agenda. Though lack of resources and technological capability may provide an alternate explanation, it reflects political acceptance of sufficiency instead of reconciliation to inability.

Recent reports on China's² and India's³ nuclear arsenal are revealing. Both China and India are in the process of technologically upgrading their arsenal rather than expanding their number of missiles and warheads. Both countries are replacing liquid propelled missiles with solid-fueled ones. Warhead numbers are increasing, but only marginally. Survivability enhancement through land mobile missiles and ballistic missile submarines (SSBNs) outlines the direction of growth of the arsenal. Both are increasing the range of missiles to cover the entire land mass of the larger adversary. The major difference is in China's massive increase in missiles with conventional warheads. Notably, China houses both class of missiles within a common organizational structure. India's arsenal of conventional missiles is not only separately controlled but is still in a nascent stage of development.

In both countries, nuclear weapons are de-mated with

the warheads and missiles stored separately which in turn reflects the rejection of the worst-case scenario of the "bolt from the blue" attack. This is the reason why the United States and Russia continue to keep some of their arsenals at high alert levels. This will change to some extent for China and India when the SSBNs are fully operational, but it would be because of technological necessity and not because of the danger due to "bolt from the blue". More importantly, both countries continue to adhere to NFU despite pressures from within for a review. The triumph of political doctrine over technological seduction that promises to deliver solutions to nuclear deterrence is evident. But what does the adherence to NFU imply for the Sino-Indian nuclear weapon relationship?

NFU doctrine of both China and India is rooted in the belief that nuclear weapons only have the core role of deterring their own kind. Both countries believe that the notion of a successful first strike is a mirage and a product of a military imagination that is politically abstracted due to the probability of severing the link between force application and achievement of political objectives. Such a possibility exists even when the initial exchange commences with low-yield weapons that nuclear war fighting adherents believe can be contained to a tolerable level of exchange. The reality is that there is no knowing what happens after the first nuclear weapon is fired at another nuclear-armed power. Historically, nuclear powers have exercised caution during crises even if pre-crisis rhetoric was bellicose.

The major payoff from NFU is that there is no room to



An Indian Agni-II intermediate range ballistic missile on a road-mobile launcher (Antônio Milena/ CC BY 4.0)

hurl nuclear threats except in retaliation for nuclear use. If the most common scenario for nuclear use between India and China is consequent to a conventional war, NFU raises the bar of nuclear use. It would require more than a stretch of imagination to visualize an issue that could justify the risk of nuclear first use by either party. Admittedly, if both sides alert their weapons, there is the possibility of nuclear use through accident, misjudgment, misperception, miscommunication and the unknowable impact of what Clausewitz described as friction. The greater possibility for use would be due to China's salami-slicing tactics which would mean limited land grabs. Nuclear weapons have no role in such a scenario but could impose caution and prevent escalation.

NFU offers the feasibility of greater stability. As the contemporary world drifts into dangerous geopolitical waters, it is time that India and China work together to vaccinate other nuclear weapon powers with NFU. Fundamentally, other nuclear weapon powers must be convinced of the need to make the world safer through privileging political doctrines that reduce the probability of nuclear use and not through technological solutions in the name of strengthening deterrence. India and Chi-

na are best placed to take the lead for evolving a Global No First Use (GNFU) Treaty since their nuclear dynamics do not threaten the world, as opposed to U.S.-Russia dynamics.

Complete nuclear disarmament is a laudable objective that is presently impeded by an increase in the global geopolitical rivalry. GNFU provides an interim step that could inject much-needed safety to a world that seems to once again be heading down the slippery slope of buttressing nuclear deterrence. China and India must seize this opportunity by rendering their convergence of nuclear ideology as a cooperative endeavor which could be met by privileging political prudence over deceptive technological fixes.

¹ "India Successfully Test Fires Nuclear-Capable Agni-5 Missile." NDTV.com. <<https://www.ndtv.com/india-news/india-successfully-test-fires-nuclear-capable-agni-5-missile-1960649>> (Accessed February 1, 2019).

² Kristensen, Hans M., and Robert S. Norris. "Chinese Nuclear Forces, 2018." *Bulletin of the Atomic Scientists* 74, no. 4 (July 4, 2018): 289–95. <<https://doi.org/10.1080/00963402.2018.1486620>>.

³ Kristensen, Hans M., and Matt Korda. "Indian Nuclear Forces, 2018." *Bulletin of the Atomic Scientists* 74, no. 6 (November 2, 2018): 361–66. <<https://doi.org/10.1080/00963402.2018.1533162>>.

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