COMMENTARY

Russian Influence on India's Military Doctrines

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Despite a growing relationship since 2000 between the United States and India and various designations that each is a "strategic partner" or "major defense partner," India's three conventional services and increasingly its nuclear program—as it moves to sea—are largely dependent on another country for mainline military equipment, India's historical friend: Russia.[1] Since the 1970s, each of the conventional services has had a strong defense procurement relationship with Russia, who tends to worry less than the United States about transferring sensitive technologies.

Currently, each of the services operates frontline equipment that is Russian—the Army with T-90 tanks, the Air Force with both MiGs and Su-30MKIs, and the Navy with a suite of nuclear-powered submarines (SSBN) and aircraft carriers that are either Russian or whose reactors were designed with Russian assistance. This creates a dependence on Russia for spare parts, maintenance, and training that outstrips any dependency India has for military equipment or operations. In peacetime, India's force posture readiness is critically dependent on maintenance and spare parts from Russia. In a protracted conflict, moreover, Russia could cripple India's military services by withholding replacements and spares. This means India cannot realistically unwind its relationship with Moscow for at least decades, while these platforms continue to serve as the backbone of Indian military power.

In terms of doctrine and strategy, although it may be difficult to trace direct influence and lineage between Russia and India, there are several pieces in India's conventional and nuclear strategy that at least mirror Russia's behavior. On the conventional side, the core formation in the quick-strike concept known as "Cold Start" or "proactive strategy options" was modeled on the Russian formation known as the "operational maneuver group" (OMG). The idea was to have a formation that could be rapidly assembled from tank and armored divisions that could break through reinforced defenses—NATO for Russia, and Pakistan's I and II Corps in the plains and desert sectors for India.

On the nuclear side, India is currently seized with the same dilemma the Soviet Union was during the Cold War: both NATO and Pakistan threaten battlefield nuclear weapons against conventional thrusts (India, at least, presumably would be retaliating following a Pakistan-backed provocation). While both states refined

their conventional concept of operations, there may have also been corresponding adjustments to their nuclear strategies. It was long believed that, in response to NATO threats to use nuclear weapons first on the battlefield, the Soviet Union had strong preemptive counterforce elements in its strategy to try to at least disarm the United States of its strategic nuclear weapons for damage limitation. It is increasingly evident that at least some serious Indian officials are interested in developing the same sort of option: preemptive counterforce against Pakistan's strategic nuclear forces, both for damage limitation and to reopen India's conventional superiority. It is no surprise perhaps, then, that India chose to go ahead with acquiring Russia's S-400 missile and air defense system, despite the threat of Countering America's Adversaries Through Sanctions Act (CAATSA) sanctions from the United States: the S-400 is key to India's damage limitation strategy, capable of potentially intercepting residual ballistic and cruise missiles that a counterforce strike might miss.

Furthermore, as India goes to sea, with SSBNs whose reactors are of Russian design provenance and built with substantial Russian help, it is entirely likely that India will mirror the Soviet/Russian deployment pattern of a "bastion model" rather than running a continuous deterrent patrol, both for survivability if Indian commanders are worried about loud acoustic signatures and for assertive command-and-control (C2) reasons. India may choose to keep its SSBNs close to—or in—port during peacetime but then flush them out during a crisis or conflict. This would certainly follow what many observers believed Soviet strategy was and offers an alternative to the US/French/UK continuous deterrent patrol model. Whether this model is consciously chosen because it is "Russian" as opposed to larger structural reasons—for example, loud SSBNs, a desire to maintain assertive control for as long as possible, or such—at the very least, the Soviets provided a template for India to follow, in addition to providing the very reactors they are using in the SSBNs.

This article details the various ways in which India has been influenced either directly or indirectly by Soviet or Russian doctrine. Directly, the most obvious influence is the sheer number and importance of the mainline military platforms each Indian service uses from Russia. Indirectly, a variety of mirrored doctrinal elements in India's conventional and nuclear strategy may suggest that, in addition to acquiring Russian platforms, India may look to Russia in how to employ and deploy those platforms—even against a very different kind of adversary: Pakistan. Given the long-term dependence India has had, and continues to have, on Russia for military hardware, it is reasonable to assume that direct influence will continue and will shape India's doctrinal choices if even in the background.

Conventional Dependencies

Since the 1970s, after America's perceived tilt toward Pakistan during the 1971 Indo-Pakistan War, India remained "non-aligned" only in name, shifting its military acquisition and defense portfolio almost entirely to Soviet platforms (with the odd French and British platform mixed in, which sometimes only served to complicate training and maintenance). As it currently stands, India's Army operates a fleet of T-90 and T-72 Russian tanks. It currently has 1,650 T-90s and almost 2,500 T-72s in its inventory, and roughly 3,000 Russian BMP-2 infantry fighting vehicles. This forms the backbone of India's armored punch against Pakistan. India is, in fact, one of the world's largest operators of T-series tanks. Whatever New Delhi's foreign policy preferences, India is critically—perhaps dangerously—dependent on Russia for its land-power projection.

More interestingly are the joint ventures that India and Russia have undertaken in missile development. The BrahMos occupies pride of place in this program—the name is an amalgamation of the Brahmaputra River in India and Moskva River in Russia, signifying the joining of the two nations in the development of the missile. Moreover, it is an incredibly fast, accurate conventional but also nuclear-capable supersonic missile that was originally and suspiciously listed at 390-kilometer range, presumably to circumvent the restrictions of the Missile Technology Control Regime. However, the missile's estimated range is closer to 600-kilometers for the initial version and 800-kilometers for future variants.[2] A hypersonic variant is speculated to have speeds up to Mach 7 or 8, which would make it one of the world's fastest missiles—and perhaps one of the most accurate—making the conventional version and a potential nuclear variant excellent counterforce weapons (against conventional and nuclear targets).

The picture for the Indian Air Force (IAF) is perhaps even worse. The backbone of the IAF is still an aging fleet of MiGs, and the Indian MiG-21 is ignominiously described as a "flying coffin," as it is being operated well beyond its service life. Yet, India continues to operate almost 250 MiG-21s, and 150 or so MiG-27 and 29s. Though it has almost a hundred British Jaguars as well, the core of India's heavy attack aircraft is a fleet of Su-30MKIs, roughly 230 of them. For nuclear delivery, India has relied on non-Russian platforms, such as the Mirage 2000 and Jaguars, for a variety of presumably wiring and nuclear-related reasons. The life of the Mirage 2000 has been extended for another decade, and India is currently searching for a long-term replacement for nuclear delivery, such as the French Rafale—which is currently the subject of political controversy over the final purchase price and order. It is possible that India wires the Su-30MKI for nuclear delivery as well, especially as it is equipped with an air-launched version

of the BrahMos, which is theoretically nuclear-capable. The overwhelming majority of the IAF's attack and fighter aircraft are thus Russian. Although there are a smattering of French and British platforms mixed in, and American transport aircraft, the IAF's combat power is again critically dependent on Russia.

The Navy is perhaps the service least dependent on Russia, with one critical exception: naval nuclear reactors for submarines and aircraft carriers (the *Vikramaditya*, for example, is the erstwhile *Admiral Gorshkov* and underwent significant refitting in Russian docks). However, India has several nuclear-powered Akula attack submarines, such as the INS *Chakra*, as well as its entire envisioned SSBN fleet, all of which are powered by Russian-provenance nuclear reactors. India operates a fleet of eight Kilo-class diesel-electric attack submarines, five Kashin-class destroyers, and six Russian guided-missile frigates as well. Although India's indigenous shipbuilding capacity exceeds its ability to produce equipment for the Army and IAF, the dependence on Russia for the core of its surface and subsurface fleet is unmistakable.

Is this dependency purely transactional, or does India import operational concepts from Russia as well? It is difficult to sometimes trace operational concepts that are staples of all militaries—like naval blockades—to a particular doctrine or inspiration, particularly given the vast differences in the adversaries India and Russia face, but there is some evidence that some Indian doctrinal concepts have Russian inspiration. Most notably, when India was searching for conventional answers to Pakistan's threat to use battlefield nuclear weapons after a terrorist attack, it became quickly apparent that India's mainstay conventional doctrine, the Sundarji Doctrine, was a nonstarter against a nuclear Pakistan. The Sundarji Doctrine leveraged India's quantitative and maneuver advantage by developing a massive Strike Corps formation concept that could threaten Pakistan's existence as a state. The northern two strike corps, I and II Corps, would engage Pakistani fortifications and defensive formations in the plains sector, while the so-called deep-thrust corps, XXI Corps, would attack Pakistan in the desert, where there was ample space for concentrating mass and maneuvering—thus, threatening to bisect the state. The development of battlefield nuclear weapons, notably the Nasr system, neutralized the Strike Corps concept because their menace was credible enough for Pakistan to threaten first use on XXI Corps as it approached vital points in the desert, since the unit would be on sparsely populated Pakistani territory.

The shortcomings of the Sundarji Doctrine were exposed in the so-called Twin Peaks crisis of 2001–2002, a 10-month military standoff sparked by the Jaish-e-Mohammed attack on India's Parliament on 13 December 2001. For the first time in its history, the Indian government, led by Prime Minister Atal Bihari Vajpayee of the Bharatiya Janata Party, ordered the mobilization of all three strike

corps for retaliation against Pakistan. After a month-long mobilization, roughly 800,000 forces had reached their assembly points, poised for a ground assault against Pakistan. Pakistan explicitly threatened nuclear use either on India or its forces if India were to send those forces across the international border. Faced with the dilemma that any retaliation by the strike corps sufficient to punish Pakistan for its provocation, by definition, risked tripping Islamabad's nuclear red lines, Vajpayee stayed his hand and—after 10 months—called the strike corps back to their peacetime cantonments in India's interior.

For its part, the Army believed that the month-long mobilization deflated the momentum and will to retaliate against Pakistan and gave Islamabad ample time to orchestrate international opinion on its behalf that put pressure on Vajpayee's government to not retaliate. Thus began the search for a conventional retaliatory concept that could mobilize quicker and had objectives that could stay below Pakistan's nuclear thresholds. This is how the concept of Cold Start emerged—the search for the ability to initiate a ground offensive from a "cold start," employ multiple shallow thrusts that could attrite the Pakistan Army in limited ways, and possibly seize small slices of territory as bargaining chips. The idea was to break up the massive strike corps into smaller formations, preposition some of the armored offensive units closer to the border, and keep the reserves as surge forces. This way, the Army could commence offensives without requiring the entire strike corps to mobilize—which takes weeks.

In developing the experimental concept, India mirrored the Soviet Union's Operational Maneuver Groups (OMG) and looked to develop similar Integrated Battle Groups (IBG). Walter Ladwig writes:

> Cold Start seeks to leverage India's modest superiority in conventional forces to respond to Pakistan's continued provocation. This doctrine requires reorganizing the Indian Army's offensive power away from the three large strike corps into eight smaller division-sized "integrated battle groups" (IBGs) that combine mechanized infantry, artillery, and armor in a manner reminiscent of the Soviet Union's operational maneuver groups. The eight battle groups would be prepared to launch multiple strikes into Pakistan along different axes of advance. It is envisioned that the operations of the IBGs would be integrated with close air support from the Indian Air Force and naval aviation assets to provide highly mobile support. As one retired Indian general described, India is seeking to "mass firepower rather than forces." At the same time, the holding corps (redesignated "pivot corps"), which would be bolstered by additional armor and artillery, would concurrently man defensive positions and undertake limited offensive operations as necessary.[3]

India never could quite get the full concept of IBGs to work—one concern was how vulnerable they were to Pakistani preemption, not to mention the difficulty of acquiring the real estate to preposition so many formations close to the international border. However, some elements remain, as the Pivot Corps concept does imbue India with some limited offensive firepower that looks akin to the OMGs. This seems to have been intentional modeling, as the Soviet Union was seized with a similar strategic problem as India: how do you leverage advantages in firepower and quantity against an adversary that threatens to use nuclear weapons first on concentrated conventional forces? So, although India could never model it directly, and is still experimenting with refinements to its conventional strategy, there is a direct lineage to the Soviet concept in Cold Start.

Nuclear Strategy

India released its official nuclear doctrine in 2003. It is composed of three pillars: minimum deterrence, no first use (NFU), and massive retaliation. None of these have obvious Soviet influence, as the Soviet strategy looks very different than India's, which is often characterized as assured retaliation. Additionally, it is reported that the drafters of India's nuclear doctrine—or at least the early 1999 unofficial draft of it—looked to the United States for doctrinal guidance on tenets such as the nuclear triad and calculated ambiguity on responding to chemical and biological attacks. Nevertheless, there are some interesting similarities, whether explicit and intentional or not.

First, on NFU, New Delhi's pledge in the 1999 *Draft Nuclear Doctrine* was that India would "not be the first to initiate" nuclear use, which leaves open the possibility that it will use first if it detects the adversary preparing for use. That is, India did leave open the possibility of preemption—something Indian officials have persistently showed an interest in despite affirming an absolute NFU stance in the official 2003 doctrine. This is similar to Russian president Vladimir Putin's recent pledge, for example: "Only when we become convinced that there is an incoming attack on the territory of Russia, and that happens within seconds, only after that we would launch a retaliatory strike."[4] Vajpayee in 2000 had stated similarly that: "we are being threatened [by Pakistan] with a nuclear attack. Do they understand what it means? If they think we would wait for them to drop a bomb and face destruction, they are mistaken."[5] A parade of officials, including former National Security Adviser Shivshankar Menon, have expressed the notion that preemption would be consistent with NFU if India detected imminent nuclear use by an adversary. This is not that far afield from what Soviet or Russian doctrine was believed to be with respect to at least strategic nuclear use (Russia leaves open the possibility of first use of theater nuclear weapons if conventional

forces are, for example, threatening the Russian homeland). Indian officials have consistently eroded the absoluteness of its NFU policy for one scenario in particular: preemptive nuclear use in the face of imminent adversary battlefield or strategic nuclear use. There is no explicit evidence that Indian officials are deliberately echoing or mirroring Soviet/Russian doctrine, but they share a strategic predicament that pushes them toward considering preemptive counterforce options. While preemptive counterforce was much more explicit in Soviet strategy, the growing authoritative voices in India expressing interest in it—from Menon, to a handful of former Strategic Forces Commanders—is hard to ignore.[6]

Related to counterforce is the missile defense piece of damage limitation strategies: the ability to intercept residuals that a counterforce strike misses. Here, India has tried to develop native layered missile defenses, including the Prithvi Air Defense system and Advanced Air Defense system. However, Pakistan's emphasis on cruise missiles and India's recognition of the limitations of its native defenses led New Delhi to pursue terminal and area defense systems from abroad. Thwarted by technology transfer issues with the Israeli Arrow system (based on the US Patriot system) and with no alternatives, India sought Russia's capable S-400 system, which possesses a performance envelope that is quite good for India. It is capable of intercepting short- and medium-range ballistic missile targets—exactly the ranges of Pakistani strategic nuclear weapons—and has a limited capability to intercept cruise missiles, in addition to its air defense capabilities. The S-400 was such a high priority for India that it was willing to risk US-levied CAATSA sanctions to continue with the purchase of four batteries from Russia. The S-400 adds a critical missile defense capability that makes a preemptive counterforce option more credible, since it provides a limited ability to intercept residuals, reducing the pressure on intelligence to find and destroy all of Pakistan's strategic nuclear forces. This is a case where Russia may directly influence Indian thinking.

The other obvious area where India and Russia share nuclear technology, and perhaps doctrine, is at sea. As noted above, India's SSBNs are all powered by Russian nuclear reactors. There was substantial Russian assistance in the development and construction of the *Arihant*'s reactor and for subsequent SSBN reactors, such as the *Aridhaman*'s. Has that assistance influenced India's concept for how it might deploy its SSBN fleet? Again, there is no conclusive evidence one way or another. However, given New Delhi's commitment to assertive control of nuclear weapons, it seems more likely that India will adopt a bastion model for its SSBN deployments, rather than a continuous deterrent patrol as the United States, Britain, and France have done. The insistence on assertive control is conceivably shared with the Russians, and perhaps even for similar reasons—a political distrust of the

military. However, it is also the case that India's first-generation SSBNs will be so noisy that exposing them in the increasingly crowded Indian Ocean waters would make them vulnerable to tracking by adversary antisubmarine warfare. Also, India is still a generation away from having enough SSBNs to support a continuous deterrent patrol model. So, at least for the foreseeable future, India has no choice but to adopt a bastion model and keep the SSBNs either in port or in the sanctuary of territorial waters during peacetime and then flush them out during a crisis or conflict. India's C2 system might be stressed as the SSBNs were flushed out, and it would not be surprising—though I have no evidence—that India's naval officers and national security elite, who are equally comfortable with the Russians and Americans, might seek tips from Russia about how to construct and manage India's C2 for the SSBN leg for a bastion model.

These are the two main features shared by India and Russia, but there is inconclusive evidence of whether, and how, Russia may have influenced India's nuclear strategy. Additionally, there are many ways in which the two are dissimilar. For one, India does not envision nuclear first use on the battlefield—it is not even seemingly interested in developing or fielding battlefield systems, as Russia does in great numbers. Second, in terms of its broader nuclear posture, India has a much more limited arsenal and does not necessarily seem interested in growing it to the proportions that Russia has. New Delhi is willing to trade quantity for quality, technology and accuracy for numbers. Although the trajectories of the arsenals are quite different, there are some areas—at sea and with preemptive counterforce—where the two do share some characteristics.

Conclusion

Russia and India have a complicated relationship—one that has endured for decades, even as India has tried to widen its portfolio of defense and strategic partnerships. However, the sheer legacy of Russian military equipment in the Indian inventory, across all the services and including nuclear systems, in addition to acquisitions of *future* systems and *codevelopment* of others, makes Russia an indispensable partner for India, much perhaps to Washington's chagrin. India cannot unwind this relationship without gutting its conventional and sea-based nuclear forces. And it is best to assume New Delhi will not undertake such drastic measures. India has become savvier about acquisition strategy, trying to get other bidders against the Russians to keep price gouging down, but in some areas—heavy attack aircraft, nuclear-powered submarines, and armored punch—India has no options.

It is, however, difficult to discern explicit Russian influence on Indian conventional or nuclear doctrine. This is not surprising given the widely different structural

conditions each country faces. However, there are areas where there are similarities, notably the Cold Start doctrine, which has clear inspiration from Soviet doctrine. Additionally, on SSBN deployment patterns, the test for Russian influence will be as India acquires enough SSBNs to theoretically be capable of running a continuous deterrent patrol. If, after inducting four or five SSBNs, India persists with a bastion model of operations, this would be strong evidence in favor of Russian influence on India. Given the technological, training, and operational relationship between the two nations as well, it would not be surprising if there is significant informal influence between the militaries and scientists on conventional and nuclear operations and strategies. This is certainly far more likely than US influence—perhaps the Indian Navy notwithstanding. ✪

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Notes

1. See: International Institute for Strategic Studies, *Military Balance 2020* (London: IISS, February 2020).
2. Missile Defense Project, "BrahMos," *Missile Threat*, Center for Strategic and International Studies, 15 June 2018, https://missilethreat.csis.org/.
3. Walter C. Ladwig III, "A Cold Start for Hot Wars?: The Indian Army's New Limited War Doctrine," *International Security* 32, no. 3 (Winter 2007/2008), 164–65, https://www.jstor.org/.
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5. Quoted in: Sarabjit Pandher, "Talks Only on Return of PoK, Says Vajpayee," *The Hindu*, 7 February 2000, https://www.thehindu.com/.
6. See: Christopher O. Clary and Vipin Narang, "India's Counterforce Temptations: Strategic Dilemmas, Doctrine, and Capabilities," *International Security* 43, no. 3 (Winter 2018/19): 7–52