

# Deterrence Adrift?

## Mapping Conflict and Escalation in South Asia

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### Abstract

Tensions between India and Pakistan spiked from 2014 through late 2015, meriting an analysis of how an armed conflict might unfold between the two nuclear-armed neighbors. A common assumption in academic and policy circles is that any modern-day Indo-Pakistani conflict would remain limited and localized, as nuclear deterrence would dissuade either side from seeking a Carthaginian peace. Accordingly, India's limited war doctrine, Cold Start, has attracted a great deal of interest and scrutiny among South Asia analysts. Cold Start envisions a shallow but high-intensity ground offensive into Pakistan with a handful of division- or brigade-sized strike formations, calibrated in such a way that avoids crossing Islamabad's nuclear redlines. The doctrine is premised on the assumption that India will be able to assert escalation control and prevent the ensuing conflict from spiraling out of hand. However, the reality is the very opposite. If a limited ground incursion is authorized, military necessity and miscalculation could very well precipitate all-out conventional war, bringing South Asia to the brink of nuclear calamity. This article distinguishes itself from the prevailing Indo-Pakistani escalation literature by mapping the military operational imperatives that New Delhi and Islamabad might face in a Cold Start contingency and by exploring the escalatory implications of the defensive strategy outlined in Pakistan's latest army doctrine, Comprehensive Response, published in December 2011.



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Narendra Modi's election as India's 15th prime minister in spring 2014 seemed like a welcome opportunity for India and Pakistan to "re-set" their perennially strained relationship. In a surprise move, Modi extended an invitation to Pakistani Prime Minister Nawaz Sharif to attend his inaugural ceremony in New Delhi. Sharif obliged, the two shook hands, and it appeared the two enduring rivals might be able to set aside their differences and begin working toward a common interest. Pessimistic analysts, meanwhile, cautioned that the underlying causes of the Indo-Pakistani rivalry remained unaddressed and relations were unlikely to improve—especially given the traditionally hawkish stance of Modi's victorious Bharatiya Janata Party (BJP), which secured a majority in the Indian Parliament.

During Modi's first year in office, the pessimistic forecast became true, as Indo-Pakistani tensions increased sharply. In July 2014, reports emerged of numerous ceasefire violations across the Line of Control (LOC) in Kashmir, with India accusing Pakistan of using artillery fire to cover the infiltration of jihadist militants behind Indian lines.<sup>1</sup> In August, India canceled a much-anticipated meeting of the two countries' foreign secretaries after a Pakistani envoy held a dialogue with Kashmiri separatists.<sup>2</sup> In early January 2015, the Indian Ministry of Defense alleged it had intercepted a Pakistani fishing boat laden with explosives off the coast of the Indian city of Porbandar, Gujarat, prompting speculation that a Mumbai-style terrorist attack had been narrowly averted.<sup>3</sup> Later that month, in another sign of the deteriorating bilateral relationship, India ordered Pakistan International Airlines to shutter its offices in New Delhi.<sup>4</sup> As 2015 progressed, the acrimony showed little sign of abatement. Sporadic skirmishes along the LOC resumed after their winter hiatus, and in May, during a political rally in Kashmir, Indian Home Minister Rajnath Singh warned, "If Pakistan wants its own welfare, then it must stop meddling in the affairs of other countries. . . . Those who want to harm the pride, integrity and sovereignty of [India] will be given a befitting reply. We trust our army, our paramilitary and our forces."<sup>5</sup> Although relations thawed unexpectedly in December 2015 following a flurry of high-level diplomacy, only time will tell whether these discussions will cultivate *détente* or stagnate like previous peace efforts.

In any event, the spike in Indo-Pakistani tensions in 2014–15 merits a careful analysis of how an armed conflict might unfold between the two nuclear-armed neighbors. A common assumption in academic and policy

circles is that any contemporary Indo–Pakistani war is likely to remain limited and localized, as nuclear deterrence would dissuade either side from seeking a Carthaginian peace.<sup>6</sup> Accordingly, much scholarly attention has been paid to India’s limited war doctrine, Cold Start. Unveiled in 2004 by the Indian Army chief, Cold Start envisions a high-intensity, short-duration ground incursion into Pakistan with a few strike units, calibrated in such a way that avoids crossing Islamabad’s nuclear red-lines.<sup>7</sup> The purported military objective is to seize a portion of Pakistani territory along the international border as a postwar bargaining chip. Many high-profile Indian commentators are sanguine that New Delhi would be able to assert “escalation control” and prevent a cross-border offensive from spiraling out of hand.<sup>8</sup>

This article contends the very opposite. What might begin as a limited ground invasion into Pakistan may well escalate into all-out conventional war with the potential for a nuclear exchange. While other analysts have written on the escalation risks of limited war in South Asia, this article distinguishes itself from the extant literature by mapping the military operational imperatives New Delhi and Islamabad might face in a Cold Start contingency and by analyzing the implications of Pakistan’s 2011 army doctrine, Comprehensive Response. The argument begins with background on India’s Cold Start doctrine and the arms procurement and doctrinal review measures Pakistan has taken in response, such as the development of tactical nuclear weapons. Next it argues why a limited-aims offensive in the style of Cold Start is likely to spiral into a full-scale conflict, citing the potential for misread intentions, geographic vulnerabilities, Pakistani defensive mobilizations, and Indian offensive operations to fuel an action-reaction cycle. Ultimately, this article concludes that a limited ground offensive into Pakistan risks opening a Pandora’s box of military necessity and miscalculation that could result in nuclear calamity.

## **India’s Cold Start Doctrine and Pakistan’s Response**

On the morning of 13 December 2001, five terrorists belonging to Pakistan-based militant groups Lashkar-e-Taiba and Jaish-e-Mohammed infiltrated the grounds of the Indian Parliament building in New Delhi. Armed with assault weapons and grenades, the attackers killed 11 and injured 18 before being subdued by police. The Indian government,

convinced the Pakistani security establishment was complicit in the attack, responded by launching Operation Parakram. India's three strike corps—headquartered in Ambala, Haryana; Bhopal, Madhya Pradesh; and Mathura, Uttar Pradesh—received orders to mobilize and deploy along the international border with Pakistan. It appeared that a fourth Indo–Pakistani war was in the offing.

Yet Operation Parakram immediately ran into a major snag. The long distance between the international border and India's strike corps cantonments (located in the interior of the country), combined with the large amount of military equipment that needed to be transported by rail, significantly delayed the mobilization process.<sup>9</sup> All told, it took the strike corps three weeks to reach their designated concentration areas. By this time, Pakistan had already countermobilized and fortified itself in preparation for an Indian attack, creating a cross-border standoff of roughly one million troops.<sup>10</sup> Moreover, the international community—particularly the United States and United Kingdom—intervened to curtail the crisis, urging restraint on India's part and compelling Pakistan to crack down on terrorism. Sensing the “window of opportunity” for punishing Pakistan had come and gone, India's political leadership lost its nerve to retaliate.

The botched mobilization process of Operation Parakram prompted India to explore new ways of inflicting military punishment on Pakistan without relying on the lumbering strike corps, which lacked the critical element of strategic surprise. New Delhi sought a swift and decisive operational concept—one that would allow it to achieve military objectives before the international community could intervene and force a ceasefire but do so in a way that skirted Pakistan's ambiguous nuclear redlines. New Delhi's thinking during this time was also influenced by its victory in the 1999 Kargil War, which saw Indian forces expel Pakistani troops and irregulars that had infiltrated Indian-administered Kashmir. The outcome of the Kargil episode suggested that India could fight and win a conventional war against a nuclear-armed Pakistan without causing undue escalation, so long as the military objectives remained limited and geographically localized.<sup>11</sup>

This period of introspection culminated in a new limited war doctrine, revealed by the Indian chief of army staff in April 2004. Cold Start, as the doctrine has come to be known, envisions multiple shallow incursions by Indian Army units across the international border

within 72 to 96 hours of receipt of mobilization orders. These forces would temporarily occupy a narrow strip of Pakistani territory (50–80 kilometers [km] deep), which would be leveraged in postconflict talks to force concessions on cross-border terrorism.<sup>12</sup> By keeping the military objectives limited and exploiting its conventional military edge over Pakistan, India believes it would be able to control the pace of escalation and avert nuclear brinkmanship. Cold Start, in other words, aims to circumvent Pakistan's nuclear deterrent and is an arguable manifestation of the deterrence stability-instability paradox.<sup>13</sup> Of note, the Indian security establishment has sought to distance itself from the Cold Start "brand" over the years and instead refers to the doctrine as the "proactive strategy." As Indian Army Chief Gen V. K. Singh remarked (vaguely) in 2012, "There is nothing like Cold Start. But we have a 'proactive strategy' which takes steps in a proactive manner so that we can achieve what our doctrines and strategies [demand]."<sup>14</sup> In any case, whether one refers to it as *Cold Start* or the *proactive strategy*, India has developed the capability to prosecute a limited blitzkrieg into Pakistan. The general consensus among South Asia specialists is that the likely catalyst for a Cold Start offensive is a major terrorist attack similar to the parliament incident or Mumbai attack of 2008—that is, an attack perpetrated by a Pakistan-based militant group with the alleged complicity of elements of the Pakistani government. With the BJP in power in New Delhi and Hindu nationalism on the rise, the potential for an act of terrorism to spark an Indo–Pakistani armed confrontation cannot be dismissed.

Operationally, the Cold Start doctrine originally called for India to reconstitute its three armor-heavy strike corps (40,000–80,000 troops each) into eight smaller formations known as integrated battle groups (IBG).<sup>15</sup> The IBGs would be garrisoned in cantonments close to the international border, such that they could mobilize and respond within the aforementioned 72 to 96 hour window. Each IBG would be the strength of approximately one army division (10,000–30,000 troops) and would be comprised of tanks, mechanized infantry, and artillery. Another force structure change envisioned by Cold Start was for India's holding corps—an assemblage of formations garrisoned close to the international border that specialize in defensive operations—to be augmented with a limited offensive punch via the provision of tanks and artillery. According to Walter Ladwig, these newly dubbed "pivot corps"

would be able to “concurrently man defensive positions and undertake limited offensive operations as necessary.”<sup>16</sup>

Over a decade has passed since Cold Start’s unveiling, and its current operationalization is mixed. To date, India has made no apparent effort to reconstitute its three strike corps into eight IBGs. Yet the Indian Army claims to have reduced the strike corps’ mobilization time from three weeks to 48 hours by way of “better road management, better offloading, better rail links, equipment and man management.”<sup>17</sup> Some experts have suggested the actual mobilization time is probably closer to five to seven days.<sup>18</sup> In addition, India has reinforced each of its four defensive holding corps along the international border with an armored brigade, granting the holding corps the flexibility to “pivot” between offense and defense. India may intend to use these newly raised armored brigades in lieu of IBGs if the decision is made to initiate limited cross-border operations. Yet any invasion of Pakistan using a handful of brigade-sized formations (3,000–5,000 troops each) would simply lack the offensive clout that eight division-sized IBGs could bring to bear. Thus, if India opts to execute a Cold Start-style offensive using these armored brigades, the three strike corps would likely be mobilized toward the international border to provide “offensive surge capability.”<sup>19</sup>

Of course, the activation of India’s strike corps is unlikely to telegraph “limited” war aims to a nervous adversary such as Pakistan, since these cumbersome formations are equally capable of deep strike and maneuver. Such a miscommunication of intent would appear to defeat the purpose of Cold Start because it risks triggering an outsized Pakistani reaction and an escalation spiral that neither side could control. India’s answer to this seeming dilemma is the theory of “escalation dominance”—the belief that India’s latent military superiority vis-à-vis Pakistan should deter escalation on Islamabad’s part at every rung of the escalation ladder, because the Indian military can match and one-up any counteroffensive Pakistan attempts. Furthermore, India believes that its nuclear doctrinal policy of “massive retaliation” nullifies any consideration of limited, defensive nuclear options by Pakistan, because the devastation from India’s retaliatory strike would be unacceptable to Pakistan’s leadership. Put succinctly, escalation dominance refers to the ability to “deter by demonstrating an ability to prevail.”<sup>20</sup>

## Pakistani Reactions

Cold Start has generated a great deal of anxiety in Islamabad. Pakistanis in Track II forums over the past decade have frequently opined that the limited war doctrine has “disturbed” deterrence stability in South Asia. Accordingly, Pakistan’s security managers have responded with visible countervailing actions intended to repair the perceived fault lines in the bilateral deterrence relationship and chip away at India’s escalation dominance theory. The hedging action that has created the most controversy thus far is Pakistan’s decision to field tactical nuclear weapons (TNW). On 19 April 2011, Pakistan’s Inter-Services Public Relations directorate (ISPR) announced a successful flight test of the Hatf-IX/Nasr—a 60-km-range, solid-fueled ballistic missile designed for launch from a road-mobile platform. According to the ISPR press release, Nasr “carries nuclear warheads of appropriate yield with high accuracy. . . . This quick response system addresses the need to deter evolving threats.”<sup>21</sup>

The deterrence logic behind Pakistan’s introduction of TNWs is the belief that these weapons, by virtue of their lower explosive yields, are a more proportionate, and therefore credible, deterrent against a limited Indian invasion than strategic, high-yield nuclear weapons. For Pakistan, the deterrence value of TNWs is enabled by Pakistan’s “first use” nuclear policy and intentionally ambiguous nuclear redlines. By implication, India’s war planners cannot be certain that a small-scale invasion would not be met with a hail of Nasr missiles. This uncertainty, in Pakistan’s calculus, should deter Indian aggression—even of a limited sort. Indeed, Pakistan’s nuclear theologians are confident that Nasr is a boon for deterrence stability, hailing the missile as a “weapon of peace” that has “neutralized” the Cold Start doctrine and established “full-spectrum deterrence.”<sup>22</sup> They dismiss India’s threat to retaliate massively against a tactical nuclear bombardment as exceedingly disproportionate, oblivious to Pakistan’s second-strike capability, and incredible. Insofar as Islamabad truly believes it can employ Nasr without prompting massive retaliation, the system can be interpreted as a Pakistani gambit for escalation dominance.<sup>23</sup> Since Nasr’s inaugural flight test, Pakistan has conducted at least four additional flight tests, which suggests a firm commitment to the TNW route. A reversal appears unlikely.

Another major step Pakistan has taken to countervail Cold Start is the development of a new army doctrine. Shortly after his 2008

appointment as Pakistan's chief of army staff, Gen Ashfaq Parvez Kayani initiated a doctrinal review and refinement process.<sup>24</sup> In support of this objective, Pakistan held a series of field exercises from 2009 to 2010 to validate the core operating principles of the forthcoming army doctrine.<sup>25</sup> The third iteration of these exercises involved approximately 20,000–50,000 Pakistani troops in the eastern part of the country, in the provinces of Punjab and Sindh.<sup>26</sup>

Pakistan's doctrinal review process culminated with the December 2011 publication of *Pakistan Army Doctrine 2011: Comprehensive Response*, which emphasizes rapid mobilization in response to a cross-border incursion by Indian forces. The doctrine also endorses a counteroffensive into enemy territory, wherever the opportunity presents itself—a principle that clashes with India's escalation dominance theory, which holds that India's military edge over Pakistan should dissuade Islamabad from deliberately amplifying the scope of violence. While a Pakistani cross-border counteroffensive would be highly escalatory, the doctrine was seemingly designed with escalation in mind to make New Delhi question its ability to keep a limited war limited and devoid of nuclear risk. Pakistan hopes this uncertainty will paralyze India's political leadership from authorizing Cold Start in the first place, or at the very least, force India to drastically curb its military objectives in a Cold Start campaign.

In summary, the advent of the Cold Start doctrine has prompted India to modify its conventional force structure to accommodate limited cross-border land operations. Pakistan, for its part, has responded by fielding TNWs and revising its war-fighting doctrine in the hopes of dispelling India's escalation dominance concept and reinforcing deterrence stability. It is possible that these countervailing steps may deter India from launching a Cold Start offensive. Then again, if New Delhi interprets these steps as bluster and authorizes a cross-border incursion, the ensuing conflict is unlikely to remain localized and limited.

### **Escalation Risks of Cold Start**

Limiting escalation in a kinetic conflict between two nuclear-armed rivals with capable militaries and a history of mutual enmity is a delicate proposition. Five escalation factors are likely to transform a limited Indian ground invasion of Pakistan—in the style of Cold Start—into a full-scale conflict. These factors include: Pakistani threat perceptions,



Pakistan's geographic vulnerabilities, Pakistani army doctrine, Indian escalatory actions, and Pakistani tactical nuclear weapons risks. Each of these escalation factors must be examined in more detail to understand the potential for a nuclear crisis.

### **Pakistan's Perception of Indian Threat**

The relationship between India and Pakistan—frequently described as one of enduring rivalry and mistrust—is beset by numerous grievances. The most well-known quarrel is the territorial dispute over Jammu & Kashmir, which remains unresolved and is punctuated frequently by artillery shelling and small arms fire across the LOC. The former princely state has been in constant turmoil since the late 1980s, when an insurgency backed by Pakistan's Inter-Services Intelligence erupted against the Indian-administered side.<sup>27</sup> Other sources of tension include the copious wars and militarized crises that have consumed the two countries since the 1947 partition—three Indo-Pakistani wars (1947–48, 1965, and 1971), the 1984 skirmish over the Siachen Glacier in Kashmir, the 1986–87 Brasstacks crisis, and the 1999 Kargil War, to name a handful. Another stumbling block in the bilateral relationship is the issue of cross-border terrorism. The 2001 attack by Pakistani terrorists on the Indian Parliament building precipitated a months'-long standoff between both countries, and another crisis unfolded in the wake of the 2008 attacks in Mumbai. India has accused the Pakistani government of complicity in these attacks, and Pakistan has professed innocence. The prolonged state of rivalry in South Asia has imbued Pakistan's security establishment with a mentality that assumes, by default, the worst of Indian intentions. This mentality colors India as an existential threat searching for an opportunity to deal a knockout blow to the Pakistani state. This pessimistic threat calculus suggests that, in the event India initiates a limited ground invasion akin to Cold Start, Pakistan is likely to mobilize disproportionately, fearing the invasion to be a prelude to something larger.

According to research by C. Christine Fair, Pakistan's distrust of New Delhi is a prominent and persistent theme in Pakistani defense literature, spanning multiple decades. Much of this literature characterizes India as an aspiring hegemon looking to subdue its western neighbor. As Pakistan's then-President Ayub Khan wrote in his 1967 autobiography, "India's ambition [is] to absorb Pakistan or turn her into

a satellite. . . . From the day of Independence, Pakistan was involved in a bitter and prolonged struggle for her very existence and survival. . . . Indian efforts in the field of foreign policy were all directed towards one aim, the isolation of Pakistan and its disintegration.”<sup>28</sup> For Pakistanis, their decisive defeat and bifurcation in the 1971 Indo–Pakistani War seemed to confirm Ayub Khan’s warning. After Bengalis declared independence, India overwhelmed Pakistan’s forces and severed East Pakistan from the west, creating the newly independent state of Bangladesh in just 13 days.

More than 40 years have passed since the events of 1971, but the passage of time has done little to reverse Pakistan’s inclination to view India through a dark lens. As prominent Pakistani academic and defense analyst Zafar Jaspal writes, “The overwhelming majority in Pakistan believe that if the balance of power were heavily skewed in favor of India, it would be likely to launch a hegemonic war against Pakistan.”<sup>29</sup> According to Jaspal, this distrustful view is shared at the highest echelons of the Pakistani government. A 2010 meeting of Pakistan’s National Command Authority, for example, accused India of a “hegemonic mindset, oblivious of dangerous implications of adventurism in a nuclearized context.”<sup>30</sup> That same year, General Kayani remarked, “Proponents of conventional application of military forces, in a nuclear overhang, are chartering an adventurous and dangerous path, the consequences of which could be both unintended and uncontrollable.”<sup>31</sup> Although Pakistan’s paranoia appears overwrought, it has been fueled somewhat by mixed messages regarding New Delhi’s views of limited warfare. Brig Gurmeet Kanwal, Indian Army, retired, for instance, contends that a majority of India’s senior army officers advocate deep strikes in lieu of limited offensives to “achieve substantial gains in as early a time frame as militarily possible.” These officers emphasize that, even in the context of limited hostilities, India is “prepared to upgrade its military response to ‘all out’ conventional war if the situation so demands.”<sup>32</sup>

Pakistan’s deep-seated fear of Indian hegemony and war aims would have escalatory implications in a future armed conflict. If India launches a ground invasion across the international border, Pakistan is likely to misread New Delhi’s intentions and interpret the attack as a prelude to an existential sledgehammer blow. This calculation is even more probable amid the fog of war, where initial haziness regarding the scale of the Indian attack—and concerns over deception—would encourage worst-

case preparations<sup>33</sup> Pakistan is therefore likely to confront India with a sweeping countermobilization, increasing the risk of an escalation spiral. As Pakistan's ex-Foreign Minister Abdul Sattar has cautioned, "There is no concept of limited war between two rival countries. If a country starts a war on a limited scale . . . anything can happen."<sup>34</sup>

Many Indian commentators are nonetheless optimistic that conditions exist for conventional war under the nuclear overhang.<sup>35</sup> Concomitant with any Cold Start incursion, the Indian government would endeavor to assure Pakistan and the international community—through public statements and private channels—that no permanent changes to territorial boundaries were sought, so as to mitigate the potential for escalation. However, it is uncertain that Islamabad would take these signals at face value. Public statements are problematic for signaling because the adversary can misconstrue the intended audience.<sup>36</sup> Though New Delhi and Islamabad also maintain direct crisis hotlines, communications during peak tensions are often sporadic, and in some instances, both sides have dismissed the reliability of the information shared.<sup>37</sup> Communicating intentions to an adversary is fundamentally difficult in war and even more so in the Indo-Pakistani context, given the level of historical baggage, animus, and mistrust that plagues the bilateral relationship.

Despite Islamabad's pessimistic construct of Indian intent, the Pakistan Army has gone on the record to say that it plans for an adversary's capabilities, not its intentions.<sup>38</sup> Even if this is the case, Pakistan would need to muster a spirited defense in a war with India, as the economic and conventional military gap between the two countries has widened markedly over the last decade. According to World Bank figures, in 2001 the Indian economy was 6.8 times larger than that of Pakistan (\$494 billion versus \$72.3 billion). In 2013 Indian gross domestic product dwarfed Pakistan's by a factor of eight (\$1.86 trillion versus \$232.3 billion).<sup>39</sup> A similar gap exists in annual defense expenditure. In 2001 the Indian defense budget was \$15.6 billion versus Pakistan's \$2.6 billion.<sup>40</sup> In 2014 the figures amounted to \$45.2 billion versus \$6.31 billion.<sup>41</sup> Thus, over this 14-year period, India began with a six-fold advantage in defense spending and currently outpaces Pakistan by a factor of seven.

Predictably, this financial asymmetry has affected the conventional balance of forces in South Asia. For one, India is able to sustain a larger standing military, with 1,346,000 active-duty personnel compared to Pakistan's 643,800.<sup>42</sup> In addition, India has been able to field tanks,

aircraft, and naval platforms in greater numbers and of more modern varieties than its western neighbor. In terms of third-generation main battle tanks (MBT), India currently operates over 800 Russian-designed T-90S models and 124 indigenous Arjun MBTs compared to Pakistan's indigenous 385 Al-Khalid tanks and 320 imported Ukrainian-built T-80UDs. India enjoys an even larger advantage in second-generation MBTs, with 1,950 Russian-built T-72M1s versus Pakistan's 275 Chinese-designed Type-85s. The force disparity is also pronounced in the air domain. The Indian Air Force has 881 combat-capable aircraft, over 300 of which are fourth-generation fighters (Su-30MKI Flanker, Mirage 2000s, and MiG-29s of various models). Pakistan operates only 125 fourth-generation fighters (JF-17 Thunders and F-16 Fighting Falcons) out of its entire combat-ready fleet of 450. As for naval figures, India has 14 attack submarines, two aircraft carriers, 12 destroyers, 13 frigates, and two dozen guided missile corvettes. The Pakistan Navy, for its part, is comprised of five attack submarines, 10 frigates, and two squadrons of guided missile patrol boats.<sup>43</sup> Shuja Nawaz, former director of the Atlantic Council's South Asia Center, summarizes Islamabad's concern over India's burgeoning military advantage as follows:

India's growing economy and armed forces, and especially its rapid development of a massive force projection capability, continues to be a concern to Pakistan. . . . [With a] large air force and navy with aircraft carriers, poised to fill the gap in the Indian Ocean created by the disappearance of the Soviet Union and the eventual retreat of the United States, India may well become the region hegemon that Pakistan and its other smaller neighbors fear.<sup>44</sup>

This glaring asymmetry would cast a further shadow on Indian efforts to signal limited war aims to Pakistan; it might even compel Pakistan to strike first if it believed an invasion were imminent, in a gambit to demonstrate resolve.<sup>45</sup> It is necessary to point out, however, that much of India's military might—three of its 13 army corps and nine of its 35 air wings—is garrisoned throughout India's eastern provinces, far from the Indo-Pakistani border. These forces are tasked with deterring and responding to any Chinese landgrab in the Indian province of Arunachal Pradesh—territory that Beijing claims as South Tibet. In addition, several of India's attack submarines and nearly half of its primary surface combatants are home-ported along India's eastern coast and the Andaman and Nicobar Islands.<sup>46</sup> Although this means Pakistani defense plans

need not account for the full combat potential of the Indian military, India's overall advantage is nonetheless onerous. For one, India plans to reinforce its eastern flank by raising a new mountain strike corps (XVII), to be headquartered in Panagarh, West Bengal, by 2021–22, which could free up additional Indian ground forces to respond to a flare-up with Pakistan.<sup>47</sup> India's air forces, meanwhile, can be reoriented quickly in a crisis or conflict, and the Indian Navy's western fleet alone outsizes the entire Pakistan Navy.

Capabilities aside, the sheer distrust of India evident in Pakistani defense literature and official statements suggests that, in a hypothetical Cold Start contingency, Pakistan is liable to interpret India's motives as hegemonic rather than limited. It is therefore likely Islamabad will order a disproportionate (if not complete) mobilization when Indian strike units cross the international border—a move that will alarm New Delhi and prompt India to deploy additional forces for strategic balancing, potentially catalyzing an escalation spiral.

### **Pakistan's Geographic Vulnerabilities**

Another escalation factor in any future Indo–Pakistani conflict will be Pakistan's acute geographic vulnerability to ground invasion. The border with India is long (more than 3,300 km, including the LOC in Kashmir), and Pakistan has a relatively narrow waistline, limiting its strategic depth.<sup>48</sup> Moreover, several of Pakistan's key population centers, motorways, and railways are within easy striking distance of the Indian border. In the event of an invasion, Pakistan is likely to countermobilize with full force as a hedge against the encirclement or cutoff of these vital points. Yet Pakistan's geographic curse is also an advantage that will enable it to quickly marshal its troops to the front lines.

A number of major Pakistani urban centers sit in close proximity to the Indian border—especially in Punjab, where the riverine terrain is amenable to higher population densities. The city of Lahore—Pakistan's second-largest in terms of population—is a critical railway hub and cultural center just 20 km from the Wagah border crossing into India. North of Lahore lie the cities of Sialkot and Gujranwala, sited 15 km and 50 km respectively from the border. Both cities are primary stops in Pakistan's north-south railway network and are possible targets of a Cold Start offensive. Indian defense analyst Bharat Karnad, for example, has spoken openly about the logic of a so-called “Sialkot grab.”<sup>49</sup> In ad-

dition, Lahore and Gujranwala are situated along Pakistan's National Highway N-5, on a segment known as the Grand Trunk Road. Highway N-5 is the main motorway connecting north and south Pakistan; it is a major vulnerability for Pakistan and a strategic prize for an Indian Army commander.

Vulnerable cities south of Lahore include Okara (60 km from the border) and Bahawalpur (100 km from the border). Though Bahawalpur is comparatively distant from the international boundary, the terrain to the east and southeast of the city is a combination of plains and open desert. This topography is highly suited for tank maneuver and could be spanned quickly by Indian forces. Both cities are threaded by Highway N-5 and Pakistan's primary north-south railway, making them alluring targets for an Indian war strategist looking to sever Pakistan's ground lines of communication. Further south is the metropolis of Karachi, the capital of the southeastern province of Sindh, which is Pakistan's financial capital and principal seaport as well as the third-largest urban center in the world.<sup>50</sup> While land forces are unlikely to threaten Karachi due to its position west of the Indus River, the city could nonetheless fall victim to an Indian naval blockade or airstrikes given its strategic significance and military infrastructure, which consists of an air force base, submarine dockyard, marine base, naval air station, and the headquarters of the Pakistan Army's V Corps.

One of Pakistan's greatest vulnerabilities also lies in the province of Sindh, where India's Ramgarh salient, northwest of the Indian city of Jaisalmer, Rajasthan, juts into Pakistani territory. Pakistan has several critical transportation lines a short distance from the edge of this salient. First is the aforementioned Highway N-5, which is a mere 40 km from the Ramgarh salient at its closest point. Second is Pakistan's north-south railway—a high-throughput, dual-track railroad that runs alongside Highway N-5. Third is the Indus River, which runs roughly parallel to Highway N-5 and the north-south railroad in Sindh province and southern Punjab. Again, these linkages are all tempting and reachable targets for Indian strategists seeking to quickly cut off Pakistan's north-south supply lines. Doing so would hamper Pakistan's ability to use seaborne trade arriving in Karachi to replenish the war effort. As a hedge against this possibility, Pakistan maintains a separate north-south motorway (Highway N-55) and railway off the western bank of the

Indus River. The railway, however, is not a main line but a branch line, and its throughput capacity is therefore limited.

Pakistani analysts are cognizant of these geographic vulnerabilities and contend they would cause a limited ground incursion by India to escalate into something larger. According to Brig Feroz Hassan Khan, Pakistan Army, retired, “Pakistan sees Indian capabilities arrayed against geographically vulnerable features and the narrow waistline in Punjab and Sindh. Pakistan’s armed forces cannot afford to trade space in a war with India. Its communication lines and population centers are vulnerable to invasion with even a minor force.”<sup>51</sup> Brig Khurshid Khan, Pakistan Army, retired, argues that Pakistan’s vulnerability is so acute that it will force Islamabad to respond to even a limited incursion with full strength. He writes, “Due to geographical constraints, Pakistan would not have the flexibility to lose space in its strategically important areas. Therefore, its army would definitely fight with its full potential to stall the Indian offensive at all levels.”<sup>52</sup> The essential premise underlying the Pakistani argument here is one of military necessity. Having so much to potentially lose, Pakistan is likely to respond vigorously to an Indian invasion—limited or otherwise.

Pakistan has sought to compensate for its geographic exposure by garrisoning its ground forces close to the international border, so as to compress its mobilization timelines. Six of the Pakistan Army’s nine corps headquarters, for example, are located east of the Indus River. Pakistan also has built army division headquarters and cantonments close to many of the at-risk population centers outlined above. In Punjab province, division headquarters are located in Gujranwala, Sialkot, Lahore, Okara, and Bahawalpur. Farther south, in Sindh province, Pakistan has cantonments in Pano Aqil and Hyderabad. Pakistan also has some recessed echelons, for example II Corps in Multan, which are positioned in such a way that they can respond to a contingency in either Punjab or Sindh.<sup>53</sup>

Pakistan’s forward garrisoning of troops, coupled with its relatively short interior lines of communication (compared to sprawling India), will allow Islamabad to marshal its forces more quickly than New Delhi in a crisis.<sup>54</sup> According to Brig Shaukat Qadir, Pakistan Army, retired, Pakistan should be able to mobilize in approximately one-third the time it takes India to do so. He writes, “When I was serving, it used to take Pakistan seven days to assemble its forces while India took 21. Though

both sides may have reduced their mobilization period since then, the ratio of time would be about the same.”<sup>55</sup> Khurshid Khan corroborates Qadir’s assessment, noting, “Because of short lines of communication, Pakistan Army is likely to be effective at a point of its own choosing before India inflicts damage.”<sup>56</sup> In addition to its ability to marshal its forces quickly, Pakistan has numerous passive defenses—man-made canals, barricades, minefields, and other prepared obstacles—that would increase ground friction and slow an Indian advance. These passive defenses are particularly concentrated in the Punjab region.<sup>57</sup>

A significant portion of the Pakistan Army, however, cannot be relocated closer to the international border in peacetime because they are devoted to counterinsurgency (COIN) duty against the Tehrik-e-Taliban Pakistan in the mountainous northwest province of Khyber Pakhtunkhwa, bordering Afghanistan. A number of analysts agree that if conflict breaks out with India, Pakistan would immediately redeploy these COIN forces—approximately 100,000 army regulars—to the eastern front.<sup>58</sup> Analysis by Jane’s Information Group, a subsidiary of IHS, Inc., suggests this redeployment would be fairly rapid thanks to Pakistan’s extensive railway architecture. In 2002, for example, echelons as high as the division level were able to deploy from border to border within a week’s time.<sup>59</sup> It is likely these mobilization timelines have been further compressed in the intervening decade-plus, but as Christopher Clary points out, there is a potential for delays in any move from the west to the east because the COIN forces are “spread out in counterinsurgency operations rather than stationed in garrisons ready to mobilize.”<sup>60</sup>

On balance, however, Pakistan appears to wield a mobilization edge over India. While this is welcome news for Pakistani defense planners, it could have dire implications for escalation. Pakistan’s ability to quickly mount an effective defense against a Cold Start invasion could produce a series of localized stalemates and greatly extend the duration of the conflict.<sup>61</sup> New fronts could open as both sides induct additional troops and leverage airpower to break the stalemates and preserve strategic balance. In this way, Pakistan’s geography could precipitate the vertical and horizontal escalation of Cold Start into a full-scale conflict.

It is difficult to see how India could prevent a limited ground invasion of Pakistan from escalating, given the geographic high stakes involved for Islamabad. An Indian breakthrough assault, if successful, could en-



circle key Pakistani population centers and cut off critical motorways and railways in the beginning days of a conflict, complicating military logistics and putting Islamabad in a precarious bargaining position. Pakistan would therefore have a compelling incentive in a Cold Start contingency to marshal its forces along the entire length of the international border in an effort to reinforce these vital areas. Fortunately for Pakistan, its forward garrisoning of forces will allow it to muster a rapid defense, but doing so will have the second-order effect of dilating the ground battle with India, creating avenues and incentives for both sides to escalate the conflict further.

### **Pakistani Army Doctrine**

To further validate the contention that Pakistan would escalate in response to a limited Indian invasion, one must examine the operating principles outlined in the Pakistan Army's latest doctrinal publication, *Pakistan Army Doctrine 2011: Comprehensive Response*. The doctrine outlines a series of fundamental guidelines by which the Pakistan Army would manage itself during a conflict against an adversary—one that is left nameless but clearly insinuated to be India.<sup>62</sup> As the doctrine states, its purpose is to serve as a “vital link between conceptual thought and practical manifestation.”<sup>63</sup> *Comprehensive Response* therefore provides a glimpse into what the Pakistan Army's overall strategy might be in a hypothetical fourth Indo–Pakistani war.

A reading of *Comprehensive Response* suggests that, if war with India occurs, the Pakistan Army will endeavor to mobilize rapidly with a larger force and take the fight to Indian soil. These operating principles imply the doctrine is intentionally geared toward the escalation of conflict. Though upping the ante would appear counterintuitive given Pakistan's conventional military disadvantage against India, the logic is actually simple. By engaging in risky behavior, Pakistan intends to, in the words of Thomas Schelling, “leave everyone just a little less sure that the war can be kept under control.”<sup>64</sup> Pakistan's aim is to paralyze New Delhi with uncertainty—that is, the possibility Cold Start could spiral into a nuclear conflagration.

The principle of rapid mobilization takes center stage in *Comprehensive Response*. The doctrine estimates that hostilities could break out at any time, with “very short notice”—an oblique reference to the blitzkrieg envisioned in India's Cold Start concept. The doctrine therefore

asserts that “all [Pakistan Army] formations organize their administrative and routine activities in a manner that effective combat potential can be generated within 24 to 48 hours from the corps to unit level and two to three days at the Army level.”<sup>65</sup> Recalling the original requirement of Cold Start was for India’s integrated battle groups to mobilize and begin offensive operations within 72 to 96 hours of receiving orders, Islamabad is implying that its objective is to be able to mobilize and deploy the entire Pakistan Army prior to any Indian attempt at cross-border ingress.

Pakistan hopes that by beating the adversary to the mobilization punch, it can achieve a decisively favorable ratio of deployed Pakistani troops to deployed enemy forces at the onset of conflict. As the doctrine states, “the force ratios [between Pakistan and the adversary] must ensure success in battle.”<sup>66</sup> The doctrine notes the Pakistan Army’s aim is to “[concentrate] requisite combat power for defensive and offensive operations to achieve decisively superior combat potential at the point of decision.”<sup>67</sup> Pakistan assumes it must mobilize quickly and compellingly in a conflict with India because India’s larger and qualitatively superior military is likely to outlast Pakistan’s in a prolonged conventional war. Pakistan’s theory of victory is to take advantage of its short interior LOCs, mobilize quickly, and seek early checkmate or deter hostilities altogether.

To facilitate rapid mobilization, *Comprehensive Response* notes that Pakistan is developing a “Forward Leaning Logistics” system to ensure its forces are kept well-supplied—without interruption—throughout the duration of a conflict.<sup>68</sup> To achieve this, Pakistan aims to construct a dispersed network of forward logistics facilities—for example, supply depots, fuel and ammo dumps, and so forth—in proximity to likely battle areas, so ground forces can sustain themselves without requiring a supply line to a main operating base. As the doctrine states, “The combat supplies of defensive and offensive forces [are] to be prepositioned well forward to ensure early readiness of combat forces, self-sustenance and reduced dependence on base logistics installations.”<sup>69</sup>

Besides rapid mobilization, the second key operating concept identified in *Comprehensive Response* is that of the counteroffensive—a concept otherwise known in Pakistani parlance as “offensive defense” or “riposte.” The premise is that Pakistan will not be content to merely “stand and fight” in a conflict with India, but will instead seek out opportuni-

ties to take the battle to Indian soil. *Comprehensive Response* states the purpose of the riposte is to “create further disincentives or leverage by seizing initiative from the aggressor.”<sup>70</sup> Elsewhere it states, “Offensive action permits commanders to exercise initiative and impose their will upon the adversary, setting the pace and determining the course of battle as well as exploiting [the] enemy’s transient or enduring weaknesses.”<sup>71</sup> It bears mention that the riposte concept is not a late-breaking addition to Pakistani doctrine; it was first demonstrated in 1989 during Exercise Zarb-e-Momin, directed by Gen Mirza Aslam Beg. Nonetheless, the inclusion of the riposte in *Comprehensive Response* is evidence that Pakistan is still committed to the concept.

What might a Pakistani riposte look like, if put into action? In terms of forces utilized, Pakistan is likely to rely on its two armor-heavy strike corps (I and II), headquartered in Mangla and Multan, respectively.<sup>72</sup> As for geographic focus, according to S. Paul Kapur, a Pakistani counter-offensive might seek to cut India’s ground LOCs into Kashmir.<sup>73</sup> The most obvious target is India’s National Highway 1A, the thoroughfare connecting Indian-administered Kashmir with Indian Punjab and the rest of the country. National Highway 1A is less than 40 km from the Pakistani city of Sialkot (the location of a major army cantonment) and is just 8–10 km from the international border. Another riposte option for Pakistan is to launch “diversionary offensives” southward into Indian Punjab and Rajasthan.<sup>74</sup> Doing so would allow Pakistan to relieve pressure on its vulnerabilities in Sindh province, particularly Highway N-5 and the north-south railway. Indeed, the logic of diversion is central to the riposte concept; Pakistan can alleviate the pressure of an Indian assault in one sector by counterattacking in another, thereby forcing Indian troops to divert.

*Comprehensive Response* notes the Pakistan Army is taking steps to bolster its ability to prosecute the riposte. Specifically, Pakistan plans to restructure its defensive holding formations garrisoned along the international border to enable them to perform “transfrontier” offensives. The aim is to achieve modularity, such that brigade-sized units could be “carved” away from the holding formations to undertake independent offensive actions.<sup>75</sup> The ideal end state for Pakistan, in other words, is that its holding forces acquire the ability to “form part of and contribute to an offensive effort.”<sup>76</sup>

Pakistan's plan to restructure its holding formations appears to be a page taken from India's playbook. India, too, has taken steps to transform its defensive holding corps into pivot corps capable of pivoting between defensive and offensive actions. By developing pivot formations of its own, Pakistan hopes to obtain the operational flexibility to prosecute offensive maneuvers through windows of fleeting tactical opportunity. If Pakistan relied solely on its strike corps to implement the riposte concept, it would have more difficulty capitalizing on transient vulnerabilities in India's defensive line. This is because Pakistan's strike corps are not garrisoned as close to the international border as the holding corps and would therefore take some time to reach their designated battle areas.

Pakistan believes that its willingness to escalate will either deter New Delhi from cross-border adventurism in the first place or achieve some degree of intrawar deterrence. The escalation logic of *Comprehensive Response* is encapsulated neatly in the document's assertion that "our ability to exploit opportunities and *the will to upscale the scope of violence* creates retrospective politico-military disincentives for the aggressor" (emphasis added).<sup>77</sup> These disincentives are rooted in uncertainty. The doctrine is an attempt to make India unsure of its ability to contain the overall conflict and prevent Pakistani use of tactical nuclear weapons. Moreover, Pakistan may believe that an escalation-centric strategy would spur the international community to intervene and force a ceasefire, precisely out of concern over the possibility of nuclear use. This risk manipulation strategy is fraught with peril, however, because a robust Pakistani countermobilization would force India to induct additional ground and air power to the battle areas to support its front lines and balance against a riposte, blurring the distinction between limited and general war. This action-reaction dynamic and its consequences are analyzed further in the following section.

### **Operational Considerations for an Indian Limited-Aims Ground Offensive**

India would find itself in a serious escalation dilemma if it opted to execute a shallow ground invasion of Pakistan. The dilemma is that there are several supporting actions the Indian military would need to take to improve the odds of operational success, yet Pakistan is likely to perceive these actions with alarm and respond accordingly. Specifically, these ac-

tions include (1) the mobilization of India's three strike corps, (2) steps to obtain localized air superiority over Pakistan in support of the ground assault, and (3) the deep interdiction of Pakistani reinforcements to prevent them from reaching the battle areas. Each action and its expected consequences are examined in detail below.

India is likely to mobilize its three strike corps during any limited-aims ground campaign for two reasons. The first is to lend "offensive surge capability" to the war effort, since the strike brigades currently attached to India's pivot corps lack the requisite firepower to "bite and hold" Pakistani territory.<sup>78</sup> As Indian Brigadier Kanwal contends, initial offensive thrusts would be "exploited by one or more strike corps, where possible, but without crossing Pakistan's nuclear red lines."<sup>79</sup> Col Ali Ahmed, Indian Army, retired, asserts the strike corps will be used—at a minimum—to break any stall in the preliminary offensive.<sup>80</sup> The second reason for strike corps mobilization is to provide assurance against a Pakistani riposte into Indian territory. India, after all, has its own share of geographic vulnerabilities, including exposed population centers and the critical motorway into Kashmir. According to Maj Ikram Sehgal, Pakistan Army, retired, India will therefore be forced to orient and assemble its strike corps in such a way that "caters" to a Pakistani counter-offensive.<sup>81</sup>

Kanwal corroborates Sehgal's assessment, noting, "As would be expected, each one of [India's strike corps] is ready to act . . . to stabilize the situation if the defensive battle of the holding (or pivot corps as these are now called) does not go as planned and appears to become unmanageable."<sup>82</sup> Since Pakistan's counteroffensive would necessarily occur in Kashmir, Indian Punjab, or Rajasthan, India might opt to assemble its strike corps in a north-middle-south orientation behind the international border. This deployment scheme would force Pakistani defense planners, in turn, to balance their own forces across a wider front, spreading them thin.

In any case, Pakistan will interpret the mobilization of India's three strike corps as an extremely escalatory step warranting a forceful counter-mobilization. Historical precedent is illustrative here, as Islamabad interpreted India's deployment of two strike corps to Rajasthan in 1986–87 during Exercise Brasstacks as a dress rehearsal for war. Pakistan responded by assembling its I and II Corps opposite Indian Punjab, setting off a crisis that nearly erupted into hostilities.<sup>83</sup> Similar mobiliza-

tion dynamics occurred after the 2001 parliament attack and are probable during a Cold Start contingency given Pakistan's military doctrine, geographic exposure, and strategic anxieties. Escalation management during an active conflict, however, is inherently more difficult than during a peacetime crisis such as Brasstacks, as troops would be joining an active battlefield rather than a cross-border standoff.

In addition to mobilizing its strike corps in the background, India would need to achieve localized air superiority in the sectors where its ground forces are conducting offensive operations inside Pakistan. Without control of the skies, India's ground assault would be decimated by the Pakistan Air Force's fleet of fighter-bombers. To avert this outcome, India at the very least would need to conduct localized combat air patrol missions to interdict any Pakistani aircraft that threatened Indian troops. It is also probable India would need to attrite a selection of Pakistani air bases by cratering runways, destroying hangars, and disabling communications towers. India could achieve this objective through deep interdiction by manned aircraft or from a standoff distance with cruise missiles, such as the supersonic BrahMos (300–500 km range).<sup>84</sup> Naturally, all of the above would darken Pakistan's reading of India's intentions, as it would vitiate Pakistan's conventional forces and could inadvertently damage any nuclear warheads or components stored at the air bases. To compensate for any attrition, Pakistan might lean more heavily on its nuclear deterrent. At a minimum, Pakistan would likely retaliate in kind against Indian air bases, potentially with a volley of air-launched cruise missiles, for example, the 300-km range Ra'ad. According to Pakistani diplomat Maleeha Lodhi, "For Pakistan, lacking sufficient frontline, high-tech aircraft, medium and short-range missiles are expected to play a conventional war-fighting role. . . . [Pakistan] is likely to feel compelled to operationally deploy its missiles in a conventional role if the threat posed by India's conventional superiority becomes more acute."<sup>85</sup>

Another supporting action India is likely to initiate is the deep interdiction of Pakistani reinforcements, so as to prevent them from joining the front lines and engaging Indian ground forces. To the extent Pakistan successfully deploys additional troops to the battle areas, India loses its ability to contain the scale of the conflict. India may therefore opt to delay these reinforcements via airstrikes against the forces themselves or by degrading and destroying Pakistan's transportation infrastructure. Clary notes that retired Indian officers in public forums have discussed

this very strategy, utilizing “some combination of Indian airpower and long-range ground systems, such as the Smerch multiple rocket launch system,” to disrupt Pakistan’s ability to reinforce its front lines.<sup>86</sup> Again, however, all of this will cut into Pakistan’s conventional war-fighting capacity and could prompt Islamabad to launch conventional missile strikes or threaten the deployment of nuclear weapons. India’s quandary, therefore, is that interdicting Pakistani reinforcements would be escalatory, but allowing them to reach the front lines would similarly expand the conflict.

Overall, India will have great difficulty calibrating a limited ground offensive in a way that does not precipitate an escalation spiral. In essence, India’s quandary reflects one of the intrinsic difficulties of limited war—that is, how to prevail and terminate hostilities against an adversary whose military capabilities have not been exhausted. As John Mearsheimer warns, “There is a real danger that a successful limited attack will evolve into a protracted war—simply because the defender, who has not been decisively defeated, will continue fighting.”<sup>87</sup>

### **Nuclear Escalation Risks**

While the exact circumstances that would prompt Pakistan to deploy a tactical nuclear weapon (Nasr) to the battlefield are unknown (given Pakistan’s intentionally ambiguous nuclear redlines), it is reasonable to assume Nasr would be deployed if India significantly degraded Pakistan’s conventional forces. Still, other analysts expect Pakistan to deploy TNWs much earlier in a crisis or conflict, to threaten Indian troops during their initial penetrations across the international border.<sup>88</sup> Regardless of deployment sequencing, Nasr will imbue the battlefield with serious nuclear escalation risk, as the system carries the potential for premature and unauthorized use.

How might the premature or unauthorized use of TNWs occur in the midst of a Cold Start offensive? To answer this question, a cursory review of nuclear command and control (C2) articulation modalities is required. Pakistan has two options at its disposal for asserting C2 over its battlefield nuclear deterrent. Option one is for the National Command Authority (NCA) in Islamabad to maintain centralized political control over launch authority. The second option is to decentralize C2 by predelegating launch authority to field commanders.

*Comprehensive Response* notes that Pakistan's nuclear C2 is centralized under the NCA.<sup>89</sup> While a centralized C2 paradigm makes sense for strategic, high-yield nuclear weapons, it is problematic in the context of TNWs because it makes the weapons tactically unresponsive to shifting battlefield dynamics, impairing their military decisiveness and overall deterrence utility. In the time it would take for a Nasr battery commander to request launch authority from the NCA, for the NCA to deliberate and arrive at the political consensus to use nuclear weapons, and for the launch codes to be transmitted to the field commander and authenticated, the prospective target—for example, an Indian tank battalion—could have overrun the battery, moved out of range, or intermingled with friendly forces. US Army doctrine from the 1970s, in fact, assumed a 24-hour delay for TNW employment authorization to be granted.<sup>90</sup> Another problem with centralized C2 is that the launch codes, which are ostensibly transmitted by radio signal, are susceptible to jamming and could be rendered unintelligible to the weapons operators.

These drawbacks are so damaging to the deterrence and war-fighting utility of TNWs that Pakistan may quickly abandon centralized C2 of its tactical nuclear forces in a conflict with India. Pakistan's alternative, then, would be to adopt decentralized C2, wherein field commanders would receive predelegated nuclear launch authority.<sup>91</sup> While predelegation would make the TNWs more tactically responsive, it introduces the risk of premature or unauthorized use.

Consider a scenario in which the predelegated commander of a Pakistani TNW battery, in the fog of war, is surrounded by an Indian tank battalion and forced to “use or lose” nuclear weapons. In this scenario, firing the weapons may seem rational from a tactical military standpoint but could be premature and counterproductive from a strategic standpoint, depending on the dynamics of the broader battle. Thus a major downside to predelegation is that it transforms the fundamentally political decision of whether or not to use nuclear weapons into a collection of localized judgment calls by military officers. Decentralized C2 also poses the risk, however remote, of unauthorized use by the proverbial “mad major” who flagrantly disobeys employment guidelines and sets off a nuclear disaster.<sup>92</sup> The escalatory implications of a tactical nuclear strike against invading Indian forces are difficult to assess, but the repercussions would be staggering if India—in spite of Pakistan's belief to the



contrary—follows through with its avowed nuclear doctrinal policy of massive retaliation.

Notably, retired Indian flag officers in numerous Track II forums have stressed that India will not wait to be bombarded by TNWs but will instead aggressively target and destroy any missile launchers it detects on the battlefield.<sup>93</sup> Brigadier Kanwal concurs, writing that India will proactively employ a combination of missiles, artillery, and airstrikes against deployed Pakistani batteries.<sup>94</sup> Although limitations in Indian intelligence, surveillance, and reconnaissance would make finding the batteries a challenging proposition, the search area would be mitigated by virtue of the Nasr's diminutive 60-km range, which implies the batteries would be deployed fairly close to the international border. To the extent India successfully locates and degrades Pakistan's battlefield nuclear deterrent, the pressure to employ the weapons will increase.

In the final analysis, the deployment of TNWs as a deterrence signaling or war-fighting measure against an Indian invasion would likely drive New Delhi and Islamabad up the escalation ladder. While it is true Pakistan has other nuclear deterrence signals at its disposal besides Nasr, for example, the raising of nuclear alert levels, veiled diplomatic pronouncements that “all options remain on the table,” dispersing nuclear assets for survivability, and ballistic missile flight tests, it has developed Nasr for the express purpose of pouring “cold water on Cold Start.”<sup>95</sup> This suggests—quite dangerously—that Pakistan believes its TNWs have conferred a degree of escalation dominance over India. At the very least, it implies that Pakistan sees TNWs as a risk manipulation device, akin to the Comprehensive Response doctrine. Thus, if New Delhi decides to launch a series of limited, cross-border ground offensives, the possibility that Indian forces will encounter Nasr cannot be ruled out.

## Conclusions

This article has attempted to map how mistrust, (mis)perception, geography, and action-reaction dynamics could magnify a limited war in South Asia into a major conflagration. Although it would seem counter-intuitive for a conventionally weaker state—in this case, Pakistan—to counterescalate against a stronger adversary, the logic of military necessity and the temptation to spook India through risky behavior would trump restraint.<sup>96</sup> Recall that Cold Start is premised on the assumption

that India can assert escalation control and prevail militarily against Pakistan without fear of crossing its ambiguous nuclear redlines. Through a combined threat of robust countermobilization, riposte, and TNWs, Pakistan transforms Cold Start into a potential springboard for total war and nuclear ruin. Pakistan's objective, therefore, is to imbue Cold Start with escalation uncertainty. Insofar as New Delhi doubts its ability to prevent a limited war from spiraling out of hand, it may be deterred from initiating a Cold Start offensive altogether or deterred within an intrawar context. Pakistan might also calculate that escalation would hasten international pressure for a UN-mandated ceasefire.

In light of the escalation concerns associated with Cold Start, there is evidence that India's strategic community may be moving away from the idea of a limited ground invasion of Pakistan in favor of concepts that might be less risky. In February 2014, former Indian intelligence official Ajit Doval delivered a speech at SASTRA University in Tamil Nadu, where he discussed his theory of the defensive offense—a strategy for waging a “gray zone” coercion campaign against Pakistan without the use of ground troops:

[In the defensive offense], we start working on the vulnerabilities of Pakistan. It can be economic, it can be internal security, it can be political, it can be their isolation internationally . . . exposing their terrorist activities . . . it can be anything. It can be defeating their policies in Afghanistan, making it difficult for them to manage internal political balance or internal security. . . . There is no nuclear war involved in [defensive offense]; there is no engagement of troops.<sup>97</sup>

Doval's statement appears to be a tacit admission that the engagement of ground troops in the South Asian theater carries an inherent potential for nuclear escalation, thus necessitating a strategic shift away from the notion of a limited ground war. With Doval's appointment in May 2014 as India's fifth national security adviser, his defensive offense concept may gain traction in New Delhi in the coming years. In fact, in May 2015, Indian Defense Minister Manohar Parrikar seemed to endorse gray zone coercion (specifically the use of proxies) as a means of punishing Pakistan for the terrorism emanating from its borders. Speaking at a public forum in New Delhi, Parrikar remarked, “We have to neutralize terrorists through terrorists only. Why can't we do it? We should do it. Why does my soldier have to do it?”<sup>98</sup>

Although this article has focused on the likely breakdown of intrawar deterrence following the initiation of a limited ground campaign by

India, the findings are also germane to deterrence and escalation management writ large. Rational deterrence holds that nuclear-armed adversaries should be dissuaded from engaging in reckless behavior for fear of catastrophic escalation.<sup>99</sup> This fear makes deterrence resilient but not assured.<sup>100</sup> Stability in an adversarial deterrence dyad can unhinge if both countries believe they wield escalation dominance over one another. This conviction can dissuade either side from backing down in a crisis or conflict, increasing the probability and consequences of war, respectively. Ambiguous redlines, meanwhile, are an uncertain firebreak, as the attacker can underestimate the defender's limits.<sup>101</sup> Applying these concepts to South Asia, "India might conclude that it can launch an invasion without provoking a nuclear reprisal, while Pakistan might believe that it can employ [tactical] nuclear weapons without triggering a nuclear exchange."<sup>102</sup> In contrast, if a prospective attacker doubts its ability to control escalation and circumvent the defender's nuclear redlines, deterrence is strengthened, evoking Thomas Schelling's concept of "the threat that leaves something to chance."<sup>103</sup> However, this might drive the attacker to seek less-escalatory coercive tools, in keeping with the stability-instability paradox.

Apart from escalation dominance, the other factors identified in this article—chronic mistrust, territorial salience, and military necessity—can also ensnare perfectly rational actors in an escalation trap. The high value that states assign to their territorial integrity, for example, can drive a defender to escalate against a ground invasion even if success is doubtful.<sup>104</sup> Escalation risk is amplified further if either belligerent maintains a land force structure optimized for deep strike and maneuver, as this muddles the signaling of limited aims. In some respects, A. J. P. Taylor's argument that World War I was "imposed on the statesmen of Europe by railway timetables" is still instructive for geographically contiguous deterrence dyads and even more so for India and Pakistan, where strike corps elements remain integral to limited war planning.<sup>105</sup> In any event, the conclusions of this article are perhaps best captured by Robert Jervis's warning that "any time military forces are set in motion, there is a danger that things will get out of control . . . . The workings of machines and the reaction of humans in times of stress cannot be predicted with high confidence."<sup>106</sup> Indeed, what begins as a limited war in South Asia may quickly assume a life of its own and escalate into the unthinkable. ■■■

## Notes

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