Between May and June of 1999, India and Pakistan engaged in a higher-intensity military conflict than any other pair of nuclear-armed states had before or have since. Although it remained geographically contained, the Kargil War resulted in hundreds of casualties on both sides and saw frantic diplomatic intervention by the United States in an effort to de-escalate the conflict. It is therefore unsurprising that the Kargil War is commonly seen as one of the few occasions that the world has come close to nuclear war, and perhaps second only to the Cuban Missile Crisis in terms of the risk of nuclear escalation. In the years since, India and Pakistan have engaged in repeated skirmishes, crises, and periods of tension, with the two countries again coming into conflict in the spring of 2019 in response to a deadly attack on Indian military forces by the Pakistan-backed terrorist group Jaish-e-Mohammed.¹

How should we think about the risks of nuclear war associated with these crises? And how should we compare the dangers and dynamics of different crises among nuclear-armed states? Was the risk of nuclear escalation, for example, higher or lower in the Kargil War than the Cuban Missile Crisis? Scholars and analysts tend to think of all nuclear crises as belonging to the same group of events and draw broad conclusions based on that set of cases. For example, by looking at the universe of nuclear crises, scholars have concluded that they are...
typically won by the state with nuclear superiority;\textsuperscript{2} by the state with the higher resolve for risk;\textsuperscript{3} and that nuclear weapons matter little to crisis outcomes.\textsuperscript{4}

However, crises among nuclear-armed states vary greatly: consider the differences between the Cuban Missile Crisis, the 1956 Suez Crisis, the 1995 Taiwan Straits Crisis, or the War in Angola during the late Cold War, for example.\textsuperscript{5} All are often considered nuclear crises, but it is clear that their dynamics and the dangers of nuclear war varied significantly. Treating this group as a single category of events with a single governing logic is therefore not only potentially misleading, but also precludes us from thinking about the important differences between these crises—differences that may be as, if not more, important than the similarities among them.

Drawing on a broader research project that offers a framework for thinking about nuclear crises comparatively, this article analyzes the risks and dynamics of the Kargil War.\textsuperscript{6} We argue that the Kargil War was what we term a “staircase crisis”—a crisis that exhibited incentives for first nuclear use, but in which the level of escalation was relatively controllable by the leaders involved. As we show, Pakistan did face incentives for nuclear first use. However, robust Indian command and control of its nuclear forces, clear Pakistani red lines for nuclear use, limited interaction of conventional and nuclear forces, and well-established lines of communication enabled leaders on both sides to control escalation. This leads us to conclude that the Kargil War may have been “safer” than a number of analysts have argued. This does not, however, mean that future crises between India and Pakistan will share the same dynamics. In fact, as the spring 2019 conflict demonstrated, recent dynamics may make future crises between India and Pakistan considerably more dangerous.

In this article, we first briefly describe the events of the 1999 Kargil War before laying out our framework for understanding nuclear crises. We apply this framework to the Kargil conflict and show how our analysis sheds light on some of its key escalatory dynamics. Finally, we draw lessons and implications for future India-Pakistan relations, concluding that future crises may not be characterized by the same level of restraint.

**The 1999 Kargil War**

India and Pakistan have disputed the status of the Kashmir region since their partition in 1947.\textsuperscript{7} The two countries share sovereignty over the territory, which is divided into Indian and Pakistani-controlled regions by a Line of Control (LoC). India continues to view Kashmir as a key part of the Indian Union, while Pakistan contends that the region’s control by India is unlawful and has made Kashmir’s liberation a central foreign policy objective.\textsuperscript{8}
In May 1998, Pakistan and India both publicly tested nuclear weapons, consolidating India’s position as a nuclear weapons state and marking the accession of Pakistan to the nuclear weapons club. Just one year later, in May 1999, war broke out when the Pakistani military, backed by local guerrilla forces, crossed over the LoC and seized control of the highlands surrounding the city of Kargil in the Indian-controlled area of northern Kashmir. In taking the Indian government by surprise, the hope was to deliver a fait accompli and prevent India from reinforcing its troops in the region. India discovered the Pakistani infiltrators in late May 1999, sparking a crisis for the Bharatiya Janata Party (BJP)-led government, which faced an estimated 1,000 regular (but non-uniformed) Pakistani forces in control of 70 positions inside its territory.

The Indian leadership responded by instructing the military to evict the Pakistani forces. Initial Indian attempts to dislodge Pakistan’s troops proved disastrous due to the region’s high passes, rugged terrain, and the entrenched positions of the Pakistani forces. As a result of these early failures, the Indian government permitted its Chief of Army Staff, General Malik, the right to employ airpower in support of ground operations—a clear escalation and the first time that Indian airpower had been used against Pakistani forces since the 1971 war. In late May, the Indian military engaged in a combined air and ground campaign that resulted in intense combat between Pakistani and Indian forces. Fighting continued and forces mobilized throughout June, as Indian leaders demanded the withdrawal of Pakistani troops to their side of the LoC.

By early July, after six weeks of heavy fighting, Pakistan was on the brink of military defeat. On July 4, Pakistan’s Prime Minister, Nawaz Sharif, travelled to Washington D.C. to meet with U.S. President Bill Clinton and request his assistance in ending the conflict. President Clinton, keen to bring a swift resolution to the war, demanded that Pakistan unconditionally withdraw its remaining forces from Indian territory and restore the ante bellum status quo. Sharif conceded to Clinton’s demands. On July 12, Prime Minister Sharif issued a public statement calling for the withdrawal of all Pakistani troops from the disputed region. The Indian military officially declared an end to hostilities on July 26, 1999.

A Framework for Thinking about Nuclear Crises

During the Kargil War, many policy analysts expressed concern that hostilities might escalate quickly to the nuclear level. Similarly, scholars have argued that this conflict brought the world to the brink of general war and could have easily ended in a nuclear exchange. Indeed, according to political scientist Paul Kapur, it was the very danger of nuclear escalation that encouraged Pakistan to initiate the conflict on the assumption that India would not want to risk nuclear
Others, however, have shown less concern. Political scientist Sumit Ganguly, for example, argues that nuclear weapons on the subcontinent have ensured restraint on both sides and have kept conflict confined to the conventional level. Since Indian and Pakistani leaders understand the scale of the consequences that would result from a nuclear exchange, they seek to avoid one at all costs. The fact that the Kargil War—and other conflicts since—have not escalated to the nuclear level is cited in support of this argument. So which camp is correct? How dangerous was the Kargil War?

In order to answer this question, we draw on a general framework developed for thinking through the dynamics of nuclear crises in a comparative perspective. This framework moves beyond current analyses of nuclear crises by seeking to incorporate variation that exists among them. It takes as a starting point an understanding that nuclear crises vary in important ways, and identifies some key sources which generate differing risks of nuclear escalation. Specifically, the framework identifies two variables that affect the ways in which nuclear crises unfold: the degree to which either participant in a crisis has incentives to use nuclear weapons first, and the extent to which crisis escalation is controllable by the parties involved. These variables, and the factors we use to identify them within individual cases, are laid out in Table 1.

Incentives to use nuclear weapons first in a crisis can emerge from at least three distinct processes. First, the preemptive use of nuclear weapons could meaningfully affect the outcome of nuclear war. This is especially the case when there is a large disparity in the size of nuclear forces between two crisis participants. In cases of significant nuclear asymmetry, there might be incentives for both sides to use nuclear weapons. The weaker side may worry that its smaller arsenal would be unable to survive a first strike by a larger power, thereby incentivizing a decision to launch nuclear weapons first before an adversary could remove this capability. The stronger side might also face pressures to use nuclear weapons first in a crisis if there is the possibility

Two variables affect the ways in which nuclear crises unfold.

<table>
<thead>
<tr>
<th>Incentives to use nuclear weapons first</th>
<th>Crisis Controllability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant nuclear asymmetry</td>
<td>Robust command and control institutions</td>
</tr>
<tr>
<td>“Asymmetric escalation” posture on either side</td>
<td>Clear and mutually understood red lines</td>
</tr>
<tr>
<td>Perceptions by leaders of political advantages associated with first use</td>
<td>Likelihood of interaction of nuclear and conventional forces</td>
</tr>
<tr>
<td></td>
<td>Avenues for crisis communication</td>
</tr>
</tbody>
</table>
of destroying or significantly degrading the smaller power’s nuclear capability. Second, crises in which one or both sides have adopted what political scientist Vipin Narang calls an “asymmetric escalation” nuclear posture to deliberately threaten the first use of nuclear weapons would be characterized by greater incentives to use nuclear weapons first. The second dimension is the controllability of the crisis by the participants involved. That is, the extent to which leaders in a crisis can take conscious and deliberate decisions to set the level of escalation reached. What determines whether a crisis is controllable or not? We use a number of observable indicators. First, publicly known and clearly stated red lines for nuclear use improve crisis controllability by minimizing the risk that one side would accidentally breach the nuclear threshold. Second, robust lines of communication between states—whether direct or mediated through a third party—can help stabilize crises and make them more controllable than those in which states are forced to communicate in an ad hoc manner or through public signalling. Third, weak command and control of nuclear forces increase the chance of a crisis spiralling out of control through the accidental or inadvertent use of nuclear weapons. By contrast, states that have centralized control over nuclear forces reduce these risks. Finally, if a state’s conventional and nuclear forces are located close together, or if a state’s conventional forces are able to target any part of the adversary’s military force that inhibits its ability to use nuclear weapons, a crisis will be less controllable. In these cases, conventional military operations may threaten, or be interpreted as threatening, a state’s nuclear capabilities.

These two variables— incentives for nuclear first use and crisis controllability—generate four possible “ideal type” models of nuclear crises, laid out in Figure 1: the “staircase” model (high first-use incentives but high controllability), the “brinkmanship” model (low first-use incentives but low controllability), the “stability-instability” model (low first-use incentives and high controllability), and the “firestorm” model (high first-use incentives and low controllability). Each of these ideal types exhibit very distinctive dynamics and offer different answers to important questions. For example, how likely is nuclear escalation, and how might it occur? Crises exhibiting high incentives for nuclear first use combined with low crisis controllability—what we term “firestorm crises”—are particularly volatile, and the most dangerous of all four models in the likelihood of nuclear war. These are the crises that should be avoided except under the most dire circumstances. By contrast, where incentives for the first use of nuclear weapons are low, and there is high crisis controllability—the stability-instability model—the risk of nuclear use is the lowest. These crises are the “safest” in terms of the risk of

How Dangerous Was Kargil? Nuclear Crises in Comparative Perspective

THE WASHINGTON QUARTERLY ■ SUMMER 2019
nuclear use. Where incentives for nuclear first use are low but crisis controllability is also low (brinkmanship crises) or crisis controllability is high but incentives for first use are also high (the staircase model), there is a moderate risk of nuclear use but through two quite different processes. For the brinkmanship model, low levels of crisis controllability combined with few incentives for nuclear first use mean that escalation to the nuclear level would likely only happen inadvertently and through a process of uncontrolled, rather than deliberate, escalation. On the other hand, high levels of crisis controllability combined with high incentives for nuclear first use—characteristics of the staircase model—mean that escalation would more likely occur through a careful, deliberate processes of decision making.

**Applying the Framework to the Kargil War**

What type of crisis was the Kargil War? And how dangerous was the risk of escalation to nuclear war? To apply our framework, we need to identify the extent of incentives for nuclear first use by India and Pakistan during the crisis, as well as the extent to which the crisis was controllable by the leaders involved.

First, the Kargil War exhibited incentives for first nuclear use, primarily because of Pakistan’s nuclear posture. Since becoming a nuclear power in 1998, Pakistan has adopted a nuclear force posture explicitly designed to deter Indian conventional attacks by threatening the first use of nuclear weapons. To deter a large-scale attack by India, Pakistan integrates its nuclear weapons into its military forces to threaten a first nuclear strike against an Indian conventional military invasion. The threat of first use is made credible by the delegative command and control of Pakistan’s nuclear forces, which allows for initiative at lower levels of the military in order to ensure that weapons remain usable during crises and are not easily destroyed by an Indian attack.25

Pakistan’s force posture in 1999 provides an objective indicator of incentives for nuclear first use. But were these incentives understood by Indian and Pakistani leaders during the course of the Kargil War? Evidence suggests that they were.
For Pakistan’s part, the country’s leaders clearly understood their position of military inferiority vis-à-vis India and made references to the use of nuclear weapons in order to deter a large-scale attack. When Indian air strikes commenced, threatening a conventional escalation of the war, the Pakistani Foreign Secretary publicly warned India that his leadership “would not hesitate to use any weapons in [Pakistan’s] arsenal to defend [its territorial] integrity.”

In addition to its verbal threats, there were also reports of Pakistan readying its nuclear weapons for use. Bruce Riedel, a senior advisor to President Clinton, notes that U.S. intelligence was aware of the Pakistani Army readying its nuclear-tipped missiles in the event of an Indian conventional attack across the border. A RAND report adds that the chronology of Pakistan’s nuclear threats “suggests that these warnings were issued only after India’s conventional redeployments had reached significant proportions and were increasingly visible to Pakistani military intelligence.”

Indian leaders also understood that Pakistan faced pressures to use nuclear weapons first should the crisis escalate. Indian Prime Minister Vajpayee was deeply concerned about the possibility of a Pakistani nuclear strike if India escalated the war by opening a second front at the border. When General Malik tried to explain to the Prime Minister that this might be militarily necessary, Vajpayee apparently looked shocked and responded, “but General Sahib, they have a nuclear bomb!” The Indian National Security Advisor, Brajesh Mishra, later acknowledged India’s fear of Pakistani nuclear first use, stating that while the Indian leadership was confident that its army would not need to cross the LoC, the use of “nuclear weapons would have been risked if we did.” News of Pakistani nuclear mobilizations were also picked up by Indian intelligence and exacerbated New Delhi’s fears. Reports noted that Pakistan’s missiles were “being readied for possible launching,” and General Padmanabhan, the subsequent Chief of Indian Army Staff, recalled that Pakistan “activated one of its missile bases and … threatened India with a nuclear attack” during the crisis.

Despite incentives for nuclear first use by Pakistan, the Kargil crisis exhibited relatively high degrees of controllability. The one factor that points to low crisis controllability was the command-and-control arrangements for the Pakistani nuclear forces. Pakistan’s nuclear posture requires a delegative command-and-control system in order to increase the credibility of nuclear first use. Delegating command and control to lower levels of command raises the risk of accidental or unauthorized nuclear use and thus reduces crisis controllability. Yet, all
other indicators point toward the crisis exhibiting a higher degree of controllability.

First, Indian leaders assert a high level of control over their nuclear forces and they are managed in a way that limits the risk of unauthorized or accidental use. Fissile materials are controlled by the Atomic Energy Department, and delivery vehicles are located separately and controlled by the military.\(^{34}\) Second, Pakistani red lines for nuclear use were relatively clear and well understood. Khalid Kidwai, the Pakistani Army’s Director of Strategic Plans, has been quoted in a widely cited report publicly detailing scenarios that would necessitate Pakistani nuclear first use, namely: “If India conquered a large part of Pakistan’s territory, destroyed a large part of its military forces, strangled Pakistan economically or caused large scale internal subversion.”\(^ {35}\) In addition, former President Musharraf claims that whenever he met with a foreign leader, “I asked him to convey my message … that if [Indian] troops took even a step across the international border of the LoC … it will not remain a conventional war.”\(^ {36}\)

These red lines appeared to be understood by Indian leaders. Although Prime Minister Vajpayee authorized the Indian Army to employ air strikes at the end of May, the government was clear that the Indian Army not enlarge “the theater of operations beyond the Kargil sector or … attack Pakistani forces, staging posts, and lines of communications across the LoC.”\(^ {37}\) This restraint is notable given that India was suffering substantial casualties at the time and would have benefitted militarily from enlarging the conflict zone.\(^ {38}\)

Third, although both sides increased the alert status of their nuclear weapons during the crisis, neither side’s nuclear forces or command-and-control centers were located near the conflict zone, meaning that the likelihood of nuclear and conventional forces interacting was low. Finally, communication remained open between the two sides throughout the crisis. Regular “calls between the prime ministers and foreign ministries, discussions with their respective high commissioners, the exchange of special envoys, and the hotline link between the two Directors of General Military Operations” were crucial to bringing about a resolution to the war.\(^ {39}\) In addition, the involvement of outside countries—the United States, but also France, Russia, China, and the UK—added additional avenues of communication.\(^ {40}\) The United States was a particularly active participant in seeking to de-escalate the conflict, with President Bill Clinton taking a personal and sustained interest in resolving the crisis.\(^ {41}\)

The Kargil War was therefore characterized by incentives for first nuclear use but also relatively high levels of crisis controllability—a “staircase” model in our framework. Staircase crises have several key characteristics: their high level of controllability means that they are characterized by deliberate escalation and de-escalation on both sides, with participants in a crisis capable of signaling their interests, capabilities and resolve. All staircase crises have a nuclear dimension and crossing

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\(^{34}\) Mark S. Bell and Julia Macdonald

THE WASHINGTON QUARTERLY ■ SUMMER 2019
the nuclear threshold is possible because of the first-use incentives that characterize them. However, the controllability of these crises means that crossing the nuclear threshold is unlikely to happen suddenly or accidentally, and without a deliberate decision to do so. As a result, the conventional balance of power will determine the outcome of staircase crises that do not escalate close to the nuclear level.

What does this tell us about the dynamics of the Kargil War? First, understanding the Kargil War as a staircase model suggests that the dangers of nuclear war were not as high as some analysts believed. Though Pakistan faced incentives for nuclear first use, relatively high levels of crisis controllability meant that there was little danger of the war spiralling out of control unless the Indians made a deliberate decision to cross Pakistan’s red lines for nuclear use. Any use of nuclear weapons would likely have been the result of a deliberate, conscious decision on the part of the Pakistani or Indian leadership, and neither side wanted to breach this threshold. India, as discussed, placed restrictions on the use of air and ground forces in order to avoid escalating the conflict, and Pakistan also took a number of measures to signal limited intentions, including withholding reserve forces, eschewing the use of air power across the LoC, and not cutting off key Indian supply routes.42

The degree of restraint demonstrated by Pakistan during the conflict poses a puzzle for those who view the Kargil War as the result of the “stability-instability paradox.” According to this view, the risk of escalation to nuclear war was even lower than we suggest since both sides in the conflict understood the implications of the nuclear revolution and the disastrous consequences of a nuclear exchange. Indeed, it is this very confidence in the “bright line” effect of nuclear weapons that enabled India and Pakistan to engage in a significant conventional conflict absent fear of escalation to all-out war. Yet if this were the case, one would have expected Pakistan, confident in the sanctity of the nuclear threshold, to escalate the conflict further rather than place restrictions on its conventional military operations.43 This interpretation of events also does not seem to explain the genuine fear among India’s civilian leadership that Pakistani nuclear weapons might be used. The degree of restraint shown as well as the concern expressed in India makes more sense under the staircase model, where the risk of nuclear war was higher due to mutually understood incentives for Pakistani first use.

Second, because both sides took conscious steps to avoid escalating too close to the nuclear threshold, the conventional balance of power largely determined India’s victory. Pakistan was on the verge of conventional military defeat when its leaders acceded to U.S. demands to withdraw their forces, and once India
was able to build up its forces sufficiently, it experienced increasing success in pushing Pakistani forces back toward the Line of Control. By contrast, neither the balance of resolve nor the nuclear balance satisfactorily explains the outcome of the Kargil conflict. Pakistan likely had greater resolve given their decision to initiate the crisis in the first place, while the nuclear balance was highly ambiguous at the time and there was significant uncertainty about each side’s capabilities. Instead, as expected by the staircase model, the conventional balance of power was decisive: India’s conventional military superiority explains the outcome of the crisis better than the nuclear balance (which was highly ambiguous) or the balance of resolve (which likely favored Pakistan).

What Lessons Can We Draw?

This reconsideration of the Kargil War demonstrates the value in treating nuclear crises as a varied class of events. Interpreting Kargil as a staircase crisis suggests that it was not quite as dangerous as many analysts have tended to suggest. Though Pakistan had incentives to use nuclear weapons first, the high controllability of the crisis, even in spite of Pakistani command-and-control arrangements—through clear red lines, robust lines of communication, Indian command-and-control arrangements, and more—meant that the likelihood of inadvertent escalation was relatively low. This conclusion also cautions against drawing lessons from one nuclear crisis to another without first understanding each case’s unique dynamics. Though some analysts drew similarities between the Cuban Missile Crisis and the Kargil War during and after the events, the dynamics of these two conflicts were in fact quite different. In contrast to Kargil, where leaders exerted high levels of control over crisis escalation, the Cuban Missile Crisis had a much greater risk of unauthorized or inadvertent nuclear use. Weak command-and-control arrangements on both sides, unclear red lines for nuclear use, poor means of communication, and conventional as well as nuclear force interaction all increased the risk of the crisis spiralling out of control. On the other hand, the Kargil War was considerably more dangerous than the 2017 Doklam crisis between India and China, where neither side had incentives for nuclear first use and the crisis was characterized by high levels of controllability. In this case, despite a significant degree of military escalation, there was little fear by either side that nuclear weapons would be used.
Finally, what should we make of the recent crisis between India and Pakistan in February 2019? In many ways the crisis appears similar to the Kargil War: Pakistan’s nuclear posture remains characterized by incentives for nuclear first use; the crisis resulted in significant escalation with Indian air strikes across the international border for the first time since 1971 and Pakistan shooting down an Indian aircraft; and both sides made efforts to diffuse the crisis relatively quickly. Pakistan returned the captured Indian pilot two days after the event as a “good will gesture” and tensions dissipated soon thereafter.\(^{46}\)

Nevertheless, the crisis revealed some troubling dynamics that might make India-Pakistan crises more dangerous in the future. First, increasing willingness to escalate on the part of Indian policymakers indicates rising Indian frustration at the constraints that Pakistani nuclear weapons impose on Indian operations and the freedom they grant Pakistan to pursue revisionist goals in Kashmir.\(^{47}\) The desire to overcome these constraints may be tempting Indian leaders to invest in military capabilities that might be used to pursue counterforce operations against Pakistan and even to consider weakening their political commitment to a No-First-Use policy. For example, India is investing in more accurate and responsive delivery systems, an array of new surveillance platforms, and air and ballistic missile defenses that exceed the requirements of a purely retaliatory posture. As political scientists Christopher Clary and Vipin Narang have noted, the development of a preemptive counterforce capability would mark a sea change in Indian nuclear strategy, and carries with it a significant risk of first-strike instability.\(^{48}\) This could make future India-Pakistan crises characterized by stronger incentives for first nuclear use on both sides.

Second, in contrast to Kargil, where the United States played a crucial mediation role and thus enhanced the controllability of the crisis, Washington was notably absent in the most recent crisis: both because the attention of senior officials was focused on other issues and because many key positions—including the U.S. ambassador to Pakistan—remain unfilled.\(^ {49}\)

Third, the emergence of social media since 1999 and resulting deluge of misleading information that can be widely and quickly shared, combined with rising nationalism and domestic political dynamics, may place ever greater pressure on Indian and Pakistani leaders to behave in a more belligerent fashion, incentivizing escalation and punishing politicians who seek to de-escalate crises.\(^ {50}\) If so, future crises between India and Pakistan may be characterized by greater incentives for first use and less controllability than the Kargil War.

The 2019 crisis revealed troubling dynamics that might make future crises more dangerous.
Because of these differences, we should not assume from the 1999 war that future conflicts between India and Pakistan will exhibit the same limited risks of nuclear escalation.

Notes


20. This is the “use them or lose them” dilemma. See Peter D. Feaver, “Command and Control in Emerging Nuclear Nations,” *International Security* 17, no. 3 (1992/93): 165.
30. Ibid.
34. Ibid, 101.
37. Quoted in ibid, 271.


43. This might include opening additional fronts in the hopes of diverting superior Indian forces. On this point see Chari, “Reflections on the Kargil War,” 364.


45. For a full analysis of this case, see Bell and Macdonald, “How to Think About Nuclear Crises,” 50–54.


