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HOW NUCLEAR SOUTH ASIA IS LIKE COLD WAR EUROPE

The Stability-Instability Paradox Revisited

Michael D. Cohen

Conventional wisdom states that the stability-instability paradox does not explain the effect of nuclear proliferation on the conflict propensity of South Asia, and that nuclear weapons have had a different and more dangerous impact in South Asia than Cold War Europe. I argue that the paradox explains nuclear South Asia; that the similarities between nuclear South Asia and Cold War Europe are strong; and that conventional instability does not cause revisionist challenges in the long run. I develop and probe a psychological causal mechanism that explains the impact of nuclear weapons on Cold War Europe and South Asia. Following the ten-month mobilized crisis in 2002, Pakistani President Pervez Musharraf may have adopted a more moderate foreign policy toward India after experiencing fear of imminent nuclear war, as Soviet Premier Nikita Khrushchev did forty years earlier. I argue that the stability-instability paradox explains Cold War Europe and nuclear South Asia and will, conditional on Iranian and North Korean revisionism, predict the impact of nuclear weapon development on these states' conflict propensities.

KEYWORDS: South Asia; Pakistan; India; Iran; Cold War; nuclear deterrence; nuclear weapons; nuclear proliferation

How have nuclear weapons impacted the conflict propensity of India and Pakistan? In an influential article on the consequences of Indian and Pakistani nuclear weapons for the war propensity of the Indo-Pakistani rivalry (hereafter referred to as South Asia), S. Paul Kapur, a professor at the US Naval Postgraduate School, argues that the stability-instability paradox (hereafter referred to as the paradox) does not explain recent violence in South Asia. The paradox predicts that if two states have survivable second-strike nuclear forces and one of the leaders believes that nuclear war is unlikely, he will have incentives to engage in limited conventional aggression against his adversary out of the conviction that any resulting crisis or war will not escalate to nuclear war. According to Kapur, in South Asia the belief that nuclear war is *likely* has caused conventional aggression, rather than the belief that nuclear war is unlikely as the paradox predicts. Kapur argues that this makes the paradox invalid in South Asia, differentiates nuclear South Asia from the Cold War standoff, and makes the former much more dangerous.

If the paradox does not explain nuclear South Asia, it might not apply to future nuclear powers such as Iran and North Korea. However, if it applies to South Asia and the



Cold War, we might expect it to apply to these cases too. Given the obvious importance of understanding the impact of nuclear proliferation on the behavior and war propensity of new nuclear powers, it makes sense to revisit the paradox to assess whether Kapur's conclusions about one of the most influential theories of the strategic implications of nuclear weapons on conventional war propensity follow from his theoretical premises. One might question whether such an exclusive focus on Kapur is warranted. However Kapur is the only scholar to have developed theoretical models to address the relationship between nuclear weapons and conflict in Cold War Europe and South Asia. His data allow a strong probe of them and are probably the best that will be available for a long time. Kapur's original 2005 International Security article has now been cited fifty-three times and is surely the orthodox wisdom on the impact of nuclear proliferation on the conflict propensity of South Asia.³ A keyword search for "stability-instability paradox" in scholarly journals yields only two other articles. His contribution to the impact of nuclear proliferation on the war propensity of South Asia has been seminal. This present article demonstrates that a more optimistic—or at least a less pessimistic—explanation is also supported by the data.⁵

I argue that the paradox does indeed explain recent Indo-Pakistani violence. Kapur's data are quite consistent with the paradox, and nuclear South Asia is in important ways like Cold War Europe. The absence of extended deterrence, along with the presence of territorially contiguous adversaries, third party intervention, and non-state terrorist groups do not undermine the applicability of the paradox to nuclear South Asia. Moreover, I arque that if the paradox is correct, nuclear weapons may not have made South Asia as dangerous as Kapur claims. It is possible that former Pakistani President Pervez Musharraf like the former Soviet Union Premier Nikita Khrushchev—challenged the status quo but that his fear of imminent nuclear escalation in 2002 moderated his revisionism. Both leaders were prepared to accept the risks of nuclear war during the 1999 Kargil war and 1962 Cuban Missile Crisis, respectively, before they experienced fear of imminent nuclear war. Fear causes what I call "pessimistic risk choices" that lead them to refrain from further nuclear compellence—forcing an adversary to take an action by explicitly or implicitly threatening the use of nuclear weapons, defined here as attempting to sustain revisions to the status quo through the combination of threats and the use of force. I show that this behavior is consistent with international relations scholar Glenn H. Snyder's formulation of the paradox and offer some supporting evidence on the effects of fear experienced in the laboratory and by plausibility probes of Khrushchev and Musharraf. To begin, I outline Kapur's argument and show that his major theoretical claims are weaker explanations than the paradox. I proceed to describe how nuclear South Asia is like Cold War Europe, and then offer an alternative explanation that is consistent with the stability-instability paradox and which suggests that the impact of nuclear proliferation in South Asia has been less destabilizing than commonly assumed.

Kapur's Argument

In this section, I first address Kapur's assessment of the literature on the paradox in South Asia and then assess his own arguments about what the paradox expects regarding the mechanisms of crises and war in the region. One might argue that what other scholars say about the paradox is unimportant if our purpose is to assess Kapur's claims. But Kapur argues that other scholars make claims about the paradox that resonate with his. If he is incorrect here, there may be grounds to doubt his other arguments. I show that two scholars that Kapur claimed draw similar conclusions to his own in fact do not. This is important because there are *no* other scholars who view the paradox in either South Asia or the Cold War as he does.

Kapur claims that "some scholars suggest that the possibility of lower-level conflict spiralling to the nuclear threshold *facilitates* [emphasis added] regional violence." The paradox, of course, assumes that this possibility *deters* violence: revisionism will only occur, according to the paradox, if leaders believe nuclear war to be very unlikely. Kapur claimed that University of California at Berkeley Professor "Lowell Dittmer states that 'fear of escalation to the nuclear level ... facilitates the resort to violence." But Dittmer claimed that both he and his contributors concurred that the paradox involves a mechanism where "precisely *because* nuclearization is assumed to provide a 'cap' on escalation, this facilitates the resort to violence." (Emphasis added.) Dittmer argued, contrary to Kapur's interpretation, that violence is caused by the *absence* of concern for escalation to the nuclear level.

Kapur also claims that Indiana University at Bloomington Professor Sumit Ganguly "broadly attributes the stability/instability paradox's effects to a 'fear of nuclear escalation." But Ganguly stated that "nuclear weapons do contribute to stability at one level, for fear of nuclear escalation." It is unclear whether Ganguly is implying that this stability is at the nuclear or conventional level, but it seems a stretch to infer from this that Ganguly claims that fear of nuclear escalation facilitates conventional violence. Ganguly is surely implying not that fear of nuclear escalation causes conventional regional violence but that it deters or contains it. He has argued as much elsewhere. This brief discussion of Kapur's assessment of the literature shows that Kapur's claim that there are two interpretations of the stability-instability paradox is surely wrong. None of the small extant literature that has addressed the paradox has argued that a high probability of nuclear war causes conventional revisionism. Kapur's claim that "the literature is unclear as to how the paradox actually causes instability in South Asia" is wrong. Only Kapur argues that the possibility of nuclear escalation facilitates regional violence.

One can argue that the paradox does not explain nuclear South Asia because India and Pakistan did not have survivable second-strike arsenals in 1999. But it is likely that Indian and Pakistani leaders believed that they could not have destroyed all of their adversary's nuclear weapons; small arsenals may be sufficient for survivable second-strike forces. I now address Kapur's core theoretical claims about why the paradox does not explain recent South Asian violence. According to Kapur, if nuclear war was unlikely, aggressive Pakistani attempts to revise territorial boundaries should have been met with vigorous unrestrained Indian responses. Kapur argues, in effect, that if the paradox explains nuclear South Asia, either we should not have observed Pakistani aggression or we should have observed vigorous Indian retaliation in response:

A low likelihood of nuclear escalation would reduce Pakistani nuclear weapons' ability to deter a conventional attack. This reduction in deterrence would leave weaker Pakistan less protected from India's conventional advantage in the event of conflict and thus

would discourage Pakistani aggression. Simultaneously, it would encourage vigorous Indian action to defend the status quo and defeat any Pakistani adventurism.¹⁴

Kapur argues that because conflict in 1999 and 2001–02 involved Pakistani aggression and restrained Indian responses, Indian and Pakistani leaders must not have believed that nuclear war was unlikely. Rather, Kapur argues, they must have believed that nuclear war was likely, or at least a "serious possibility." The likelihood of nuclear war, in Kapur's argument, caused Indian restraint and third party mediation of the Kashmir dispute to prevent nuclear escalation. This emboldened Pakistan to attempt to internationalize the Kashmir dispute in an attempt to revise the status quo. Kapur thus claims that

Pakistani adventurism would be encouraged only if nuclear escalation became a serious possibility in the event that a limited Indo-Pakistani conflict spiralled to the level of full-scale conventional conflict. Now Pakistani leaders could engage in limited conventional aggression, believing that India would probably be deterred from launching a full-scale conventional response. Additionally, third parties, which might otherwise be uninterested in an Indo-Pakistani conflict, would likely become concerned and possibly seek to mediate the Kashmir dispute in an effort to prevent a nuclear confrontation. Thus, Pakistani aggression would be likely in a South Asian security environment where instability at the strategic level enabled limited conventional instability. (Emphasis added.)

The problem with all of this is that the Pakistani limited challenge to the status quo at Kargil in 1999—that did not threaten the core interests of India and Pakistan and thus never threatened to escalate to nuclear war—is precisely what the paradox would predict. Pakistani behavior at Kargil would undermine the paradox if, as Kapur stipulates, the aggression was premised on the Pakistani belief that nuclear escalation was a sufficiently "serious possibility" to pose a serious threat. But the claim that the Kargil war planners believed that their revisionism might have caused nuclear escalation under some conditions has no empirical support. Musharraf and his associates did not challenge the status quo at Kargil because they believed that any escalation would bring a real risk of nuclear war. Kapur's own evidence suggests that their beliefs that a nuclear crisis was unlikely motivated the Kargil plan. For example, former Foreign Ministry Director General for South Asian Affairs Jalil Jilani stated that "since Pakistan's acquisition of nuclear capacity, Pakistan has felt much less threatened;" nuclear weapons allowed policies that could "put a check on Indian ambition." This hardly suggests that he believed nuclear war was likely.

Kapur's argument that the Pakistanis should have realized that Indian retaliation was inevitable and therefore not have challenged the status quo assumes that the costs of Indian retaliation would have been sufficient to deter aggression. But the gains were perceived to be high and the costs low. Many of the Kargil war planners believed that a revision of the status quo was politically imperative. Indian troop deployments were dispersed throughout the country with many far from Kashmir, and mobilization for a conflict in Kashmir is harder in the winter. This would have inhibited immediate Indian retaliation on Pakistani troops and would have created further incentives for Pakistani territorial revisionism. The former head of Pakistan's Inter-Services Intelligence (ISI) directorate said at the time that "the Indian army is incapable of undertaking any conventional operations at present." Furthermore, the Kargil war planners seem to have incorrectly believed that Indian isolation after the May 1998 nuclear tests would have

caused the United States to intervene in any crisis in a manner favorable to Pakistan.²⁰ This belief was obviously incorrect as the United States intervened favorably to India; President Bill Clinton went to great lengths to ensure that Pakistan was viewed as having gained nothing from the Kargil transgression.²¹ It is not clear how all of this undermines the paradox: Pakistani leaders believed that nuclear war was unlikely and that there were gains to be had from a limited challenge to the status quo. The original paradox predicted that if one leader believed nuclear war was unlikely he might challenge the status quo. It is hard to see how Pakistani behavior does not confirm the relevance of the paradox to South Asia.

Kapur's stipulation that the paradox expects vigorous Indian retaliation to Pakistani aggression, given Indian leaders' beliefs that nuclear war is unlikely, is also odd. Kapur is only correct that the paradox expects such Indian beliefs to cause vigorous Indian retaliation if beliefs about the probability of nuclear escalation are the *only* cause of Indian policy. Indian Prime Minister Atal Bihari Vajpayee and his advisers could have believed that nuclear war was unlikely but refrained from a vigorous response for other reasons. Because India's dispersed peacetime deployments and the desire to appease international public opinion also influenced Indian restraint, the Indian belief that nuclear war is unlikely led to restraint in the face of Pakistani aggression. But this is also fully consistent with the paradox.

Kapur himself notes other causes of Indian restraint: "dispersed peacetime deployment patterns limit India's ability to bring its forces to bear on Pakistan. ... In the short term, Pakistan may be able to field a somewhat larger force in the border region than the Indians."²² The desire to appease international public opinion and receive a desirable US response strongly influenced Indian policy during the Kargil war and the subsequent ten-month crisis.²³ Kapur's stipulations about the Pakistani and Indian policy we should have observed if the paradox is correct are unconvincing. Pakistani challenges and Indian restraint are quite consistent with paradox logic.

US Crisis Management

I now address Kapur's claims about US involvement and the paradox. His basic argument is that nuclear escalation is a "serious possibility" or realistic threat because US leaders and their advisers believe it to be. Because it assumes that leaders believe that nuclear war is improbable, the paradox, according to Kapur, must be wrong. But this argument is only correct if US concerns about the probability of nuclear escalation in South Asia are the same as those of revisionist Pakistan.

Kapur argues that "Pakistan's policy exploited the possibility of subsequent nuclear escalation in a full-scale Indo-Pakistani conventional confrontation." But he offers no evidence that *Pakistani* leaders believed that either a full-scale conventional confrontation or nuclear escalation was probable. Rather, he claims that such *Indian* beliefs caused Indian restraint and that US concerns about nuclear escalation motivated Washington to address the Kashmir issue. One of Kapur's interviewees, Jalil Jilani, claimed that:

central to Pakistani strategy has been the recognition that 'it is always possible for [conventional conflict] to get out of hand.' This recognition has 'deterred India' and made clear to the international community that it 'has a stake in achieving peace in the region.'²⁵

There is no evidence in this remark or elsewhere of Pakistani leaders' beliefs that nuclear escalation was likely motivating them to challenge the status quo. Rather, it suggests that Pakistani leaders' beliefs about India's resolve emboldened them. Similarly, Pakistani strategists were likely emboldened by US concerns about nuclear escalation. The key point here is that the Pakistanis were not emboldened because they thought that nuclear escalation was possible. Rather, they were emboldened because they believed that it was improbable, and that Indian and US beliefs that it was possible would favorably influence their response to Pakistani revisionism. It is a long stretch to infer strategic nuclear instability from Indian and American beliefs about the potential for nuclear escalation when there is no evidence that the weaker revisionist state that challenged the status quo believed that nuclear escalation was likely. Evidence that the Pakistanis thought that nuclear escalation at Kargil was likely would falsify the paradox because Pakistan challenged the status quo. But no such evidence exists. There is little theoretical and empirical support for Kapur's claims that instability at the strategic level caused conventional instability. It is more plausible that Pakistani beliefs that nuclear war was unlikely caused recent violence: this is precisely what the paradox expects.

Nuclear South Asia and Cold War Europe

Kapur offers another reason why the paradox does not explain nuclear South Asia: Cold War Europe exhibited a different strategic environment and causal mechanism involving nuclear weapons and revisionism. He claims that the weaker state in the Cold War was content with the status quo, while in South Asia the weaker state is revisionist. Nuclear South Asia is unlike Cold War Europe, according to Kapur, because "the Soviets, the potentially revisionist power in Cold War Europe, were conventionally stronger than NATO [North Atlantic Treaty Organization]." He elaborates that "the strategic conditions that gave rise to Cold War stability/instability dangers are precisely reversed in South Asia" where "Pakistan, the revisionist state in the Indo-Pakistani conflict dyad, is conventionally weak relative to India."²⁶

Much depends here on how one defines and measures military power. One could argue that in total conventional war, the Soviet Union would have prevailed over NATO forces. But it is unclear that the concept of total conventional war makes sense in the nuclear age; such a conflict would likely have escalated to nuclear war where winners and losers would be harder to determine. A more relevant indicator of superior conventional military power may be the ability to make and sustain revisions to the status quo. The most likely form of such Soviet revisionism was usually considered to be a surprise attack with standing forces because a major mobilization would eliminate the benefits of surprise.

Kapur concedes that the Soviet conventional superiority thesis was subsequently called into serious question.²⁷ But the influential research that he cites seriously undermines his claim that the Soviet Union was conventionally superior to the United States. It argues that NATO forces would have been able to deter or withstand such a Soviet/Warsaw Pact surprise attack. It is more plausible that rough parity existed between Soviet (Warsaw Pact) and US (NATO) forces. Cornell University Professor Matthew

Evangelista focused on the 1947-48 period and found that "Soviet troops were not capable of executing the kind of invasion feared in the West during the late 1940s."28 Former US government officials Alain Enthoven and Wayne Smith addressed the 1960s and concluded that "NATO and the Warsaw Pact were roughly equal in terms of soldiers, guns, vehicles, infantrymen, and the like. In many respects, we were 'superior:' in some respects, they were."²⁹ Massachusetts Institute of Technology Professor Barry Posen addressed the 1980s and concluded that "NATO forces are fully competitive with the Warsaw Pact in Central Europe," and "would probably thwart a conventional attack."30 University of Chicago Professor John Mearsheimer also addressed the 1980s and argued that "there is ample reason for thinking the Soviets cannot overrun Germany with conventional forces. ... NATO has a good chance of defeating a conventional Warsaw Pact attack in Central Europe." Moreover, Mearsheimer argued that "the common image of overwhelming Pact materiel superiority, created by misleading 'bean counts' of unrepresentative classes of equipment, is simply incorrect."31 Khrushchev and his colleagues agreed with Soviet Defense Minister Rodion Malinovsky that "our inferior position was impossible to us."32 He stated that "so long as the Soviet Union was the weaker superpower, it had to practice brinkmanship to keep its adversary off-balance."³³ Cuban leader Fidel Castro claimed in 1992 that, during the Cuban Missile Crisis, "we didn't believe that it (Soviet capability) was greater than that of the United States." One might argue that these analyses do not undermine Kapur's claims about Soviet conventional superiority in the 1950s because US decision makers at the time believed it. But the critical belief for assessing the validity of the paradox is that of the revisionist state, and Khrushchev believed that he was either conventionally inferior or unable to sustain revisions to the Berlin status quo.

The problem with Kapur's claim that Soviet conventional superiority differentiates Cold War Europe from South Asia is that while the Soviets may have been in better shape against NATO than the Pakistanis were against India, both the Soviet Union and Pakistan lacked the conventional superiority to realize their revisionist ambitions. Both were unable to sustain long-term changes to their status quo and made limited challenges to the status quo in a manner expected by the paradox. The similarities in the relationship between nuclear weapons and revisionism in Cold War Europe and nuclear South Asia are strong.³⁴

Other Potentially Differentiating Variables

If the conventional balance of forces does not significantly differentiate the impact of the paradox on stability/instability dynamics in South Asia from Cold War Europe, what of other variables particular to India and Pakistan? One might argue that the important role of favorable US intervention in Kashmir that may have partly motivated the Kargil war planners differentiates the impact of the paradox in South Asia from Cold War Europe. The desire for favorable third party intervention might change the source of Pakistani motivations, but it is not clear that Pakistani leaders were emboldened to challenge the status quo more than Khrushchev was during the Cold War. Pakistani leaders might be more emboldened if they believed that favorable US intervention would be likely. But they would also have to consider unfavorable and costly reactions by more powerful third

parties, and this may substantially reduce Pakistani revisionism. It is unclear that possible third party intervention makes Pakistani challenges more or less likely than in the Cold War, where third party intervention was impossible. Did Pakistan challenge Indian positions in Kashmir between 1999 and 2002 more than Khrushchev challenged the Western presence in Berlin between 1959 and 1962? The role of third party intervention does not necessarily differentiate nuclear South Asia from Cold War Europe.

The US extended deterrence commitment to its NATO allies to respond to Warsaw Pact aggression was presumably less credible than India's commitment to retaliate to Pakistani aggression in Kashmir or India itself. Pakistan-sponsored insurgents who have attacked targets inside India, as well as Pakistan's territorial contiguity with India, also differentiate nuclear South Asia from Cold War Europe. Do these variables mitigate the validity of the paradox to South Asia or differentiate it from Cold War Europe? Deterring aggression against a third party (extended deterrence) involves different strategic dynamics than deterring aggression directed at one's own territory. Everything else being equal, extended deterrence is less likely to be effective than direct deterrence. But all else may not be equal: challengers in extended deterrence situations might believe that nuclear escalation is less likely than those in direct deterrence contexts because defenders would be less likely to risk nuclear war over their ally than the defense of their own territory. Defenders in extended deterrence situations might thus believe that they are more vulnerable to challenges and do more to convince the challenger that nuclear war will likely result from challenges more than defenders in direct deterrence contexts. Defenders in extended deterrence contexts could pursue policies—like positioning American tactical nuclear weapons in Europe—that make nuclear war very likely if challenges occur. If challengers in extended deterrence contexts realize this, it is not clear that direct or extended deterrence contexts should exhibit different levels of challenges.

Some recent studies have suggested that a better predictor of the probability of initiating or reciprocating a dispute is not whether the case involves direct or extended deterrence but how experienced the states are with nuclear weapons. Michael Horowitz and Erik Gartzke (of the University of Pennsylvania and the University of California at San Diego, respectively) showed that new nuclear powers are more likely to reciprocate crises and have their crises reciprocated than experienced nuclear powers.³⁵ Horowitz found that the probability that a nuclear state will reciprocate a dispute with a non-nuclear state drops from .53 one year after developing nuclear weapons to .23 fifty-six years later. Horowitz found that two new nuclear powers are 67 percent more likely to reciprocate a dispute than two average non-nuclear states. Two experienced nuclear states are 65 percent less likely to reciprocate. The probability of dispute reciprocation between an experienced and new nuclear power is 26 percent greater than two non-nuclear states, and the probability of a very experienced state and a somewhat experienced state reciprocating is 42 percent less. Horowitz also found that the effect of experience with nuclear weapons is strongest for nuclear challengers. The different structures of strategic interaction in direct and extended deterrence do not render the paradox invalid in nuclear South Asia.

The Cold War exhibited neither Soviet-sponsored insurgents that attacked targets inside the United States nor direct territorial contiguity between principal adversaries. Although these dynamics differentiate South Asia from the Cold War, they do not render the paradox an invalid tool to explain South Asia. There is no logical link between territorial proximity and revisionism: shorter missile flight paths and the lack of advanced and robust early warning systems in South Asia could deter a challenge through a higher probability of inadvertent escalation, or provide incentives to start one through beliefs in quick victories. Weak command and control infrastructures and inadvertence or accidents could cause a crisis but also deter one through fear of inadvertent nuclear escalation. Pakistan-sponsored insurgent groups that have struck targets inside India might make Indian responses, Pakistani retaliation, and nuclear war more likely. But they could also, by bringing India and Pakistan to the nuclear brink, instill sufficient concern in Pakistani leaders of inadvertent escalation to distance them from the insurgent groups they sponsor and perhaps even encourage Indo-Pakistani cooperation.³⁶ India's new Cold Start doctrine, designed to guickly penetrate Pakistani territory and destroy terrorist infrastructure after a terrorist attack before Pakistan is able to retaliate, could increase the probability of inadvertent escalation. But it could also deter Pakistani sponsorship of terrorists.³⁷ There is no reason why the paradox does not explain a region that exhibits territorially contiguous adversaries and state-sponsored terrorist attacks. These variables do not undermine the validity of the paradox to South Asia.

Conventional Instability and Nuclear Learning

If the paradox is correct, should we expect to observe continued conventional aggression until the challenger's revisionist ambitions are realized? This question has not only obvious policy implications but also significant theoretical significance. Columbia University's Robert Jervis noted that the question of how states adjust to an unacceptable situation is a "yawning gap in our knowledge." 38 Kapur argues that if the paradox is correct, "attempts to stabilize Indo-Pakistani relations at both the nuclear and subnuclear levels could be futile, or even dangerous, as increased strategic stability allows more low-level conflict."39 His theoretical model expects weak revisionist states to indefinitely challenge the status quo; he attributes Pakistani restraint in Kashmir after the resolution of the 2001-02 tenmonth crisis to "pressure from the United States to join American anti-terror efforts after September 11, 2001."40 But this is an ad hoc revision to the theory and may be incorrect. Coercive diplomacy usually fails.⁴¹ The Clinton and George W. Bush administrations unsuccessfully attempted to stop Pakistani revisionism in Kashmir before September 2001, so there are not strong reasons to expect it to have worked thereafter.⁴² More generally, if Kapur's model is the last word on the impact of nuclear proliferation on state conflict propensity, then weak, revisionist, new nuclear powers should indefinitely challenge the status quo. But they do not: experience affects the conflict propensity of new nuclear powers.43

Kapur offers, and rejects, an explanation for Pakistani moderation in Kashmir after 2002 based on learning. He notes that perhaps "India and Pakistan have discovered that conventional violence in a nuclear environment is unproductive and dangerous." ⁴⁴ He

argues, however, that this is not the case because "the learning that has occurred has been largely dysfunctional and dangerously hawkish."⁴⁵ To support this claim, he cites evidence that suggests that Pakistani leaders learned that Kargil-style compellence operations are useful for achieving Pakistani strategic objectives. Musharraf, for example, claimed that "whatever movement has taken place so far in the direction of finding a solution to Kashmir is due considerably to the Kargil conflict."⁴⁶ Musharraf, however, likely learned a different lesson from the Kargil war in the 2001–02 crisis. He was prepared to accept the risk of nuclear compellence causing nuclear war before Kargil; he did not experience fear of imminent nuclear war during that conflict and seems to have learned from it that nuclear compellence would continue to realize Pakistan's interests. But I argue below that the experience of having feared imminent nuclear war around May 30, 2002, seems to have made him much less willing to accept it thereafter.

I have elsewhere developed a theoretical model grounded in realist theory and social psychology that explains the high conflict propensity of new nuclear powers.⁴⁷ I cannot satisfactorily outline it here: rather, in this section I outline a causal mechanism involving fear of imminent nuclear war and the paradox that explains the impact of nuclear weapons on the conflict propensity of Cold War Europe and South Asia. It suggests that if the paradox is correct, we should not expect long-term revisionism by weak revisionist nuclear powers. The basic idea is that leaders challenge the status quo based on their willingness to risk the low probability outcome of nuclear war, as the paradox predicts, and cause a nuclear crisis in that or a subsequent challenge. The crisis causes them to experience fear of an imminent nuclear war. This experience of fear, conditional on beliefs about control over the crisis, causes them to moderate their revisionism. Leaders learn about the limits and/or dangers of nuclear compellence not from the historical record but their own direct experiences. 48 The experience of fear of imminent nuclear war does not, I argue, cause risk aversion.⁴⁹ It does not influence estimates of how undesirable nuclear war is or even the probability of inadvertent escalation. Rather, assuming that leaders believe that there is a fixed probability of nuclear compellence causing inadvertent escalation, it causes them to prefer options that eliminate the risk of nuclear war. Such policies tend to involve refraining from further nuclear compellence. I refer to such beliefs here as "pessimistic risk estimates." Whereas before experiencing fear of imminent nuclear war, leaders were prepared to roll the dice and practice nuclear compellence, after experiencing such fear they are not. Snyder originally suggested that the fear of nuclear escalation substantially moderates the temptation to be emboldened after nuclear weapon development.⁵⁰ It is odd that almost none of the paradox literature has addressed Snyder's extension to his argument.⁵¹ Kenneth Waltz claimed that deterrence does not depend on rationality but fear.⁵² But we do not know how and when fear causes deterrence to succeed in the nuclear age.

Fear in the Laboratory

Experimental studies have shown that experiencing fear has a systematic impact on one's acceptance of risk. Harvard University and University of California at Berkeley psychologists Jennifer Lerner and Dacher Keltner developed the appraisal tendency framework to show

that the experience of fear has systematic impacts on judgment and choice. Appraisal themes are goal-directed processes through which emotions exert effects on judgment and choice until the emotion-eliciting problem is resolved. They systematically link specific emotions to specific judgment and choice outcomes.⁵³ Fear is defined by the appraisal themes of uncertainty, unpleasantness, and lack of control in new situations.⁵⁴ Fearful people will, as a consequence of this appraisal tendency, perceive greater risk across new situations. The same patterns for fear (and anger) appeared in experimental studies across tasks assessing risk perception, risk preferences, and one's comparative chances of experiencing a variety of positive and negative events.⁵⁵Fearful individuals consistently made relatively pessimistic risk judgments regardless of whether fear was naturally occurring or experimentally induced, judgment targets were relevant to the subject, probabilities of different outcomes were known or not, or estimates were expressed publicly or privately.

In one experiment, participants predicted the likelihood that specific positive and negative events would occur in their own life compared with the lives of relevant peers. The differences observed for fear (and anger) influenced not only choices with known probabilities and little personal consequence, but also judgments with unknown probabilities and real personal consequence. In another study, respondents exposed to a fear-inducing manipulation assigned, on average, a 7.8 percent higher probability to five negative consequences of terror than did respondents exposed to an anger-inducing manipulation. These emotions carried over to probability judgments for routine risks having no obvious connection to the terrorism related manipulations. Other studies have shown that Lerner and Keltner's basic insight about appraisal tendencies apply to other emotions. Lerner and Keltner showed that fear is more likely to cause pessimistic risk choices where people feel that they have some control over the situation. The effect of fear on risk will be strongest when people are unsure of how much they can control the situation and predict the future. Extremes of high or low certainty about future control tend to minimize the effect.

Fear and the Paradox

Experiencing the fear of imminent nuclear war should—conditional on beliefs about control of a nuclear crisis—moderate a weak revisionist leader's nuclear compellence. Refraining from nuclear compellence is hardly risk-free. But risk is central to most of international politics, and accepting the status quo will usually be less risky for weak revisionists than further nuclear compellence. Leaders who experience genuine fear of imminent nuclear war but believe that they have no control over whether nuclear war occurs should accept further risk, perhaps authorizing or encouraging the use of nuclear weapons. Leaders in the defending state that experience such fear may also moderate their policies, but defender moderation may not be necessary to cause the challenger to accept the status quo.

One inferential challenge should be noted at the outset. Even if India and Pakistan behaved roughly like the United States and Soviet Union, we cannot determine if the cause is the effect of fear or that the later participants learned from the earlier experiences.⁶⁰ But leaders tend to not learn from other states' history.⁶¹ If both cases

exhibited compelling situations and leaders experienced fear of imminent nuclear war before they moderated their revisionism, this might suggest that the personal experience of fearing imminent nuclear war is more likely to influence a state's nuclear compellence strategy than learning from history. If Pakistani leaders learned from Cold War history, perhaps they should have moderated their revisionism before experiencing fear of imminent nuclear war in May 2002.

There is now strong evidence that Nikita Khrushchev and Pervez Musharraf experienced fear of imminent nuclear war. The evidence necessary to test hypotheses about the paradox and fear of imminent nuclear war involves longitudinal data about political leaders' emotional states and orientations to risk. This may be one reason why, despite the centrality of psychological processes of perception and fear to nuclear deterrence and proliferation, relatively little work has applied psychological models to the subject since Jervis's seminal contributions. 62 I rely on a 2010 interview with Pervez Musharraf and the relatively extensive historical record on Nikita Khrushchev to establish the effect fear of imminent nuclear war had on risk choices. I also argue that it appears that Khrushchev and Musharraf did not experience this fear before October 1962 and May 2002, respectively. The goal of this section is not to definitively confirm that the experience of fear of imminent nuclear war explains the impact of nuclear proliferation in Cold War Europe and South Asia. Rather, I aim to establish that the explanation outlined here is as consistent with available data on the Cold War and South Asia as Kapur's orthodox wisdom, and is consistent with the paradox. Insofar as it offers a theoretically coherent model for Pakistani behavior before and after September 11, 2001, it moves beyond Kapur's basic model.

Nikita Khrushchev experienced fear of imminent nuclear war around October 24, 1962. The cause seems to have been his belief that Soviet naval challenges to the quarantine around Cuba may have caused inadvertent escalation, although later events in the crisis may have reinforced this. He admitted to his Presidium colleagues on October 25 that he "started out and then got afraid." About six weeks later, Khrushchev informed international peace activist Norman Cousins that "... I was scared. ... I was frightened about what could happen to my country—or your country or all the other countries that would be devastated by a nuclear war." If Khrushchev's associates who succeeded him in 1964 also experienced fear of imminent nuclear war in October 1962, they may have been similarly unwilling to challenge the Berlin or Cuban status quo.

There is now some evidence suggesting that Pervez Musharraf also experienced fear of imminent nuclear war during the second peak of the 2001–02 crisis. After an attack killed more than thirty civilians at a military camp in Jammu, Indian Prime Minister Vajpayee publicly vowed to authorize his mobilized infantry strike forces to invade Pakistan. Musharraf believed that an Indian attack was imminent, ordered missile tests on May 25, 26, and 28 to deter India, and believed that the Pakistani reaction to an Indian attack would directly or indirectly cause nuclear escalation. He "hardly slept for several nights" because he "feared nuclear war."

The experience of fear of imminent nuclear war may have been necessary to cause the deterrence of Soviet revisionism after 1962 and Pakistani revisionism after 2002. Earlier challenges that did not cause the decision makers to experience fear of imminent nuclear war resulted in further challenges. Absence of evidence is not evidence of absence, but the extensive literature on the Cold War crisis years offers no evidence that Khrushchev experienced fear of imminent nuclear war before October 24, 1962.⁶⁷ While Musharraf seems to have experienced fear of imminent nuclear war during the second peak of the ten-month crisis at the end of May 2002, he does not appear to have experienced fear of nuclear escalation at Kargil. He argued, consistently with many other South Asian commentators, that the Kargil war was "controlled and localized." He seems to have learned of the economic and political costs of the Kargil operation but continued to believe that covertly sponsoring the Kashmir insurgency might achieve his goals. Like Khrushchev, his nuclear compellence strategy toward his primary nuclear weapon-equipped adversary seems to have been substantially moderated by his experience of fear of imminent nuclear war in May 2002.

One can argue that the paradox does not explain South Asia because violence in Kashmir and India after 2002 declined but did not disappear. Explaining the causes of terrorist violence in Kashmir and India since then is difficult because the relationship between Musharraf and his successor, General Ashfaq Kayani, other members of the Pakistani military and intelligence, and terrorist groups such as Lakshar-e-Taiba is unclear. Some might argue that the 2008 terrorist attacks in Mumbai falsify the psychological model because they were sponsored by the Pakistani army and caused a major Indo-Pakistani crisis. It is unlikely, this argument would run, that Kayani concluded that sponsoring terrorism from behind a shield of nuclear deterrence is too risky. But it is not clear that Lakshar-e-Taiba, the group responsible for the attacks, had the support of the ISI or the Army. Nor is it clear that the Indo-Pakistani crisis exhibited the escalatory potential of the 2001–02 crisis.

Those responsible for training and recruiting the attackers may have been retired ISI and Army officials.⁷⁰ It is possible that the original government-sponsored plan was for a much smaller scale operation in Kashmir that was then undermined by the Lakshar, such that the Army and ISI lost operational control of it.⁷¹ One of the reasons that the 2008 Mumbai crisis was dangerous was that one of the organizers of the attacks called Pakistani President Asif Zardari and Army General Ashfaq Kayani from prison, pretending to be the Indian external affairs minister, and threatened them with an imminent military response.⁷² Many analysts believe that one of the motives for the attacks was to undermine secret Indo-Pakistani peace talks.⁷³ Moreover, while Pakistan has increased production of nuclear weapons and deployed tactical nuclear missiles close to the international border, these are more defensive than offensive. While they may be designed to deter Indian retaliation to Pakistani-sponsored terrorism in India, they could also be designed to deter Indian aggression in the aftermath of attacks by terrorist groups that Pakistan no longer controls.⁷⁴ Moreover, the presence of terrorist groups that want war between India and Pakistan creates incentives for India and Pakistan to cooperate sufficiently to eliminate the challenge.

The hypothesis that Musharraf's experience of fear of imminent nuclear war moderated—but did not eliminate—Pakistani revisionism explains the same evidence as Kapur's claim that the US commitment to Afghanistan had this effect. Pakistani restraint was likely overdetermined. But it is also possible that US pressure after the September 11

attacks was unnecessary to moderate Pakistani behavior. Musharraf's fear of imminent nuclear war may have been sufficient to do this.

Conclusion

I have argued that Kapur's claims about the validity of the paradox to nuclear South Asia are incorrect. Nuclear stability, not instability, encouraged conventional instability in South Asia. There is no evidence that *Pakistani* beliefs that nuclear war was possible, rather than beliefs that it was unlikely, caused Pakistani aggression. Nuclear South Asia exhibited stability/instability mechanisms linking nuclear proliferation to crises or wars similar to those of Cold War Europe. Several variables that differentiate nuclear South Asia from Cold War Europe do not render the paradox invalid to the former. I have argued that the fear of imminent nuclear escalation that Pervez Musharraf experienced at the second peak of the ten-month crisis may have moderated Pakistani revisionism in a similar manner to Soviet revisionism forty years earlier. The development of nuclear weapons by India and Pakistan has caused short-term instability. But the claim that this is inconsistent with the paradox is wrong, and the assertion that long-term instability is inevitable is far from clear. Short-term instability may be necessary for long-term stability. Absent the experience of fear of imminent nuclear war, Soviet challenges in Berlin and Pakistani challenges in Kashmir may have persisted after 1962 and 2002.

Scholars and policy makers need to understand that the impact of nuclear proliferation on patterns of stability and instability in South Asia is very similar to that of Cold War Europe and consistent with Snyder's original paradox formulation. The paradox may also predict the consequences of Iranian nuclear weapons. If Khamenei and/or the senior Revolutionary Guard commanders have revisionist preferences and develop nuclear weapons, they may risk the low probability of nuclear war and attempt to increase the cost of US influence in the Persian Gulf through harassing Persian Gulf tanker traffic, coercing US regional allies, and increasing sponsorship of the insurgency in Iraq and elsewhere. Like the Soviets and Pakistanis, fear of imminent nuclear war might be necessary for Iranian leaders to reject the risk of nuclear escalation and moderate their revisionism. Thus, Council on Foreign Relations scholars James Lindsay and Ray Takeyh recently suggested that a nuclear Iran would be most dangerous "at first, when it would likely be at its most reckless." But, "like other nuclear aspirants before them, the guardians of the theocracy might discover that nuclear bombs are simply not good for diplomatic leverage or strategic aggrandizement." "

The effects of fear of imminent nuclear war on the conflict propensity of nuclear powers suggest some counterintuitive policies for the United States. If beliefs about extreme levels of future control do not cause pessimistic risk estimates, leaders of new nuclear powers who believe that they are about to be struck by nuclear or conventional attacks might use nuclear weapons. President Barack Obama would therefore do well to unilaterally take pre-emptive strikes off the table.⁷⁶ Attempts to spark crises to induce experiences of fear would be a bad idea because the new nuclear power leaders would rightly believe that they had little control over the crisis and perhaps use nuclear weapons. On the other hand, leaders in Iran and North Korea may develop nuclear weapons capable

of targeting their primary adversaries and attempt to revise the status quo and cause a nuclear crisis. Obama should discourage regional powers from pre-emptively attacking the new nuclear power, and should be wary of intervening in nuclear crises because other potential nuclear revisionists could learn that nuclear compellence is effective because Washington will bail them out of trouble. The Cold War and South Asian cases suggest that the experience of fear of imminent nuclear war will moderate Iranian and North Korean revisionism in the manner originally predicted by Snyder. If nuclear proliferation is dangerous when leaders learn it is safe, it becomes safe when they learn it is dangerous.

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NOTES

- 1. S. Paul Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability: Why Nuclear South Asia is Not Like Cold War Europe," in Scott D. Sagan, ed., Inside Nuclear South Asia (Stanford, CA: Stanford University Press, 2009) pp. 184-218. This is a revised version of "India and Pakistan's Unstable Peace: "Why Nuclear South Asia is Not Like Cold War Europe," International Security 30 (Fall 2005), pp. 127–52. All references here are to the 2009 version. See also S. Paul Kapur, "Ten Years of Instability in Nuclear South Asia," International Security 33 (Fall 2008), pp. 71–94, and S. Paul Kapur Dangerous Deterrent: Nuclear Weapons Proliferation and Conflict in South Asia (Stanford, CA: Stanford University Press, 2007).
- For the original statement of the paradox, see Glenn H. Snyder, "The Balance of Power and the Balance of Terror," in Paul Seabury, ed., The Balance of Power (San Francisco, CA: Chandler, 1965), pp. 184–201, pp. 198–99.
- 3. According to a simple Google search, October 10, 2013.
- 4. Robert Rauchhaus, "Evaluating the Nuclear Peace Hypothesis: A Quantitative Approach," Journal of Conflict Resolution 53 (April 2009), pp. 258–77, and Frank C. Zagare, "NATO, Regional Escalation and Flexible Response," Journal of Peace Research 29 (November 1992), pp. 435–54. For other analyses of the paradox, see Robert Jervis, The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon, (Ithaca, NY: Cornell University Press, 1989), pp. 19–23; Sumit Ganguly, "Indo-Pakistani Nuclear Issues and the Stability/Instability Paradox," Studies in Conflict and Terrorism 18 (October-December 1995), pp. 325–34; Michael Krepon and Chris Gagne, eds., The Stability-Instability Paradox: Nuclear Weapons and Brinksmanship in South Asia, Report No. 38, Henry L. Stimson Center, June 2001; and Michael Krepon, "The Stability-Instability Paradox, Misperception, and Escalation Control in South Asia," in Michael Krepon, Rodney W. Jones, and Ziad Haider, eds., Escalation Control and the Nuclear Option in South Asia (Washington, DC: Henry L. Stimson Center, 2004), <www.stimson.org/images/uploads/research-pdfs/ESCCONTROLCHAPTER1.pdf>.
- 5. For another argument that the end of the Cold War has not changed the strategic consequences of nuclear proliferation as much as commonly assumed, see Francis J. Gavin, "Same As it Ever Was: Nuclear Alarmism, Proliferation and the Cold War," *International Security* 34 (Winter 2010), pp. 7–37.
- 6. Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p. 187.
- Of course, without a specification of what these probabilities are, these claims might speak past each other.
- 8. Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p. 187.
- Ibid., p. 187; Lowell Dittmer, "South Asia's Security Dilemma," Asian Survey 41 (November–December 2001), p. 903.

- Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p. 187. The reference is to Sumit Ganguly, Conflict Unending: India-Pakistan Tensions Since 1947 (New Delhi: Oxford University Press, 2002), pp. 122–23.
- 11. Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p. 187.
- 12. See Ganguly, "Indo-Pakistani Nuclear Issues and the Stability/Instability Paradox," Sumit Ganguly, "Nuclear Stability in South Asia," *International Security* 33 (Fall 2008), pp. 45–70, and Sumit Ganguly and R. Harrison Wagner, "India and Pakistan: Bargaining in the Shadow of Nuclear War," *Journal of Strategic Studies* 27 (September 2004), pp. 479–507.
- 13. Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p. 187.
- 14. Ibid., p. 185. See also pp. 189, 193.
- **15.** Ibid., p. 193.
- 16. Ibid., p. 193.
- 17. Ibid., p. 196.
- Sumit Ganguly and Devin T. Hagerty, Fearful Symmetry: India-Pakistan Crises in the Shadow of Nuclear Weapons (Seattle, WA: University of Washington Press, 2005), p. 153.
- 19. Kapur, Dangerous Deterrent, p. 123, footnote 44.
- 20. Ashley Tellis, C. Christine Fair, and Jamison Jo Medby, Limited Conflicts Under the Nuclear Umbrella: Indian and Pakistani Lessons from the Kargil Crisis (Santa Monica, CA: RAND, 2002), p. 21. Christine Fair conducted the interviews in Pakistan and reported that most of her interviewees believed that India's isolation after its nuclear test loomed large in Pakistani strategy at Kargil. C. Christine Fair, Assistant Professor, Center for Peace and Security Studies, Edmund A. Walsh School of Foreign Service, Georgetown University, interview with author, Seattle, Washington, September 2, 2011
- Bruce Riedel, "American Diplomacy and the 1999 Kargil Summit at Blair House," Center for the Advanced Study of India Policy Paper Series, University of Pennsylvania, 2002.
- 22. Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p. 192.
- Brajesh Mishra, former Indian National Security Adviser to Prime Minister Vajpayee, interview with author, New Delhi, April 2010.
- 24. Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p. 196.
- 25. Ibid., p. 196.
- 26. Ibid., p. 189.
- **27.** Ibid., p. 188, footnote 19.
- 28. Matthew Evangelista, "Stalin's Postwar Army Reappraised," International Security 7 (Winter 1982–83), pp. 110–38, quotation is on p. 111. He elaborated (p. 119) that when one considers that "Soviet divisional manpower has historically numbered 50 to 60 percent of Western divisional manpower, and that Soviet divisions have far fewer support troops, the picture looks different. ... an image of rough parity emerges."
- Alain C. Enthoven and K. Wayne Smith, How Much is Enough? Shaping the Defense Program, 1961–1969 (New York, NY: Harper and Row, 1971), p. 142.
- 30. Barry R. Posen, "Is NATO Decisively Outnumbered?," International Security 12 (Spring 1988), pp. 186–202, quotations are on pp. 189 and 200. See also Barry R. Posen, "Measuring the European Conventional Balance: Coping with Complexity in Threat Assessment," International Security 9 (Winter 1984–1985), pp. 47–88.
- 31. John J. Mearsheimer, "Numbers, Strategy and the European Balance," *International Security* 12 (Spring 1988), pp. 174–185, quotations are on pp. 184 and 180–81.
- 32. Ernest R. May and Philip D. Zelikow, eds., *The Kennedy Tapes: Inside the White House During the Cuban Missile Crisis* (New York, NY: W. W. Norton & Co., 2002), p. 422.
- 33. James G. Blight, Bruce J. Allyn, and David A. Welch, Cuba on the Brink: Castro, the Missile Crisis, and the Soviet Collapse, (New York, NY: Pantheon, 1993), p. 254. See Aleksandr Fursenko and Timothy Nafatli, Khrushchev's Cold War: The Inside Story of an American Adversary (New York, NY: W.W. Norton & Co., 2006), p. 6; William Taubman, Khrushchev: The Man and His Era (New York, NY: W.W. Norton & Co., 2003).
- 34. For another argument that notes the similarities between Soviet strategy at Cuba and Pakistani strategy at Kargil, see Robert Jervis, "Kargil, Deterrence and International Relations Theory," in Peter R. Lavoy, ed., Asymmetric Warfare in South Asia: The Causes and Consequences of the Kargil Conflict (New York, NY: Cambridge University Press, 2009), pp. 377–97.

- 35. Michael Horowitz, "The Spread of Nuclear Weapons and International Conflict: Does Experience Matter?" *Journal of Conflict Resolution* 53 (April 2009), pp. 234–57 (see especially pp. 244, 247–50); Erik Gartzke, "Nuclear Proliferation Dynamics and Conventional Conflict," May 1, 2010, http://dss.ucsd.edu/~egartzke/papers/nuketime_05032010.pdf
- **36.** The nature of Pakistani sponsorship of terrorist groups in Kashmir and India since at least 2002 is unclear, and could range from actively coordinating missions and providing weapons and training, to the provision of territorial sanctuary.
- See Walter C. Ladwig III, "A Cold Start for Hot Wars? The Indian Army's New Limited War Doctrine," International Security 32 (Winter 2007/2008) pp. 158–90.
- 38. Jervis, Kargil, deterrence and international relations theory, p. 383.
- 39. Kapur, "Revisionist Ambitions, Conventional Capabilities, and Nuclear Instability," p.185.
- 40. Ibid., p. 201; Kapur, Ten Years of Instability in Nuclear South Asia, pp. 88-92.
- 41. Robert J. Art, "Coercive Diplomacy: What Do We Know?" in Robert J. Art and Patrick M. Cronin, eds., The United States and Coercive Diplomacy, (Washington, DC: United States Institute of Peace Press, 2003), pp. 359–420; Alexander George and William E. Simons, "Findings and Conclusions," in Alexander George and William E. Simons, eds., The Limits of Coercive Diplomacy, Second Edition (Boulder, CO: Westview Press: 1994), pp. 267–94.
- **42.** For more detailed studies of Pakistani sponsorship of terrorism, see Ahmed Rashid, *Descent into Chaos: The United States and the Failure of Nation Building in Pakistan, Afghanistan and Central Asia* (New York, NY: Penguin, 2008); Zahid Hussain, *Frontline Pakistan: The Struggle with Militant Islam* (New York, NY: Columbia University Press, 2008), and Farzana Shaikh, *Making Sense of Pakistan* (New York, NY: Columbia University Press, 2009).
- 43. Horowitz, Does Experience Matter?
- 44. Kapur, "Why Nuclear South Asia is Not Like Cold War Europe," p. 201.
- 45. Ibid., p. 202.
- **46.** Ibid., p. 202, footnote 95.
- Michael D. Cohen, When Proliferation Causes Peace: Leaders and the Psychology of Nuclear Learning, unpublished book manuscript.
- **48.** I use the definition of learning provided by Jack Levy. I define learning as a change of beliefs, degree of confidence in one's beliefs, or the development of new beliefs, skills, or procedures as a result of the observation and interpretation of experience. Jack S. Levy, "Learning and Foreign Policy: Sweeping a Conceptual Minefield," *International Organization* 48 (Spring 1994), pp. 279–312.
- **49.** Beliefs about imminent nuclear war refer to genuine beliefs that nuclear war is imminent. They are distinct from beliefs that recognize nuclear danger but not imminent nuclear escalation.
- 50. Snyder, The Balance of Power and the Balance of Terror, p. 199, italics added. Fear is defined here as dread of impending disaster that tends to cause intense urges to defend oneself by escaping a situation. It is differentiated from anxiety, which is an ineffable and unpleasant feeling of foreboding. See Arne Ohman, "Fear and Anxiety: Overlaps and Dissociations," in Michael Lewis, Jeannette M. Haviland-Jones, and Lisa Feldman Barrett, eds., Handbook of Emotions, 3rd. ed. (New York, NY: Guilford Press, 2008), pp. 709–29, p. 710.
- **51.** For an exception, see Jervis, The Meaning of the Nuclear Revolution.
- 52. Kenneth N. Waltz, "Waltz Responds to Sagan," in Kenneth N. Waltz and Scott D. Sagan, eds., *The Spread of Nuclear Weapons: A Debate Renewed* (New York, NY: Norton, 2003), p. 154.
- 53. Jennifer S. Lerner and Dacher Keltner, "Beyond valence: Toward a model of emotion-specific influences on judgment and choice," Cognition and Emotion 14 (2000), pp. 473–93; Jennifer Lerner and Dacher Keltner, "Fear, Anger and Risk," Journal of Personality and Social Psychology 81 (July 2001), pp. 146–59.
- 54. Certainty is the degree to which future events seem predictable and comprehensible. Control is the tendency to which events seem to be brought about by individual agency or situational variables. See Craig A. Smith and Phoebe C. Ellsworth, "Patterns of cognitive appraisal in emotion," Journal of Personality and Social Psychology 48 (1985) pp. 813–38.
- 55. Lerner and Keltner, "Fear, Anger and Risk;" Jennifer Lerner, Roxana M. Gonzalez, Deborah A. Small, and Baruch Fischhoff, "Effects of fear and anger on perceived risks of terrorism: A national field experiment," Psychological Science 14 (2003), 144–50; Baruch Fischhoff, Roxana M. Gonzalez, Jennifer

- S. Lerner, and Deborah A. Small, "Evolving judgments of terror risks: Foresight, hindsight, and emotion," *Journal of Experimental Psychology: Applied* 11 (2005), 124–39.
- 56. Lerner and Keltner, "Fear, Anger and Risk," p. 150.
- 57. Lerner et al, "Effects of Fear and Anger," p. 147.
- 58. See, for example, David DeSteno, Richard E. Petty, Duane T. Wegener, and Derek D. Rucker, "Beyond valence in the perception of likelihood: The role of emotion specificity," Journal of Personality and Social Psychology 78 (March 2000), pp. 397–416; Larissa Z. Tiedens and Susan Linton, "Judgment under emotional certainty and uncertainty: The effects of specific emotions on information processing," Journal of Personality and Social Psychology 81 (December 2001), pp. 973–88.
- 59. Lerner and Keltner claim that events that are ambiguous in terms of control and predictability "should serve as inkblots that are open to interpretation," hence magnifying the emotions' effect on cognitions. Lerner and Keltner, "Fear, Anger and Risk," pp. 151, 156.
- 60. Jervis, "Kargil, deterrence and international relations theory," p. 379.
- Robert Jervis, Perception and Misperception in International Politics, (Princeton, NJ: Princeton University Press, 1976).
- 62. Ibid., pp. 241–42; Robert Jervis, Richard Ned Lebow, and Janice Gross Stein, Psychology and Deterrence, (Baltimore, MD: The Johns Hopkins University Press, 1985); Jervis, "The Meaning of the Nuclear Revolution." For exceptions, see Jonathan Mercer, Reputation and International Politics, (Ithaca, NY: Cornell University Press, 1996); Jacques E.C. Hymans, The Psychology of Nuclear Proliferation: Identity, Emotions and Foreign Policy, (New York, NY: Cambridge University Press, 2006); Rose McDermott, "Emotions and War: An Evolutionary Model of Motivation," in Manus I. Midlarsky, ed., Handbook of War Studies III: The Intrastate Dimension, (Ann Arbor, MI: University Of Michigan Press, 2009) pp. 30–62; Stephen P. Rosen, War and Human Nature (Princeton, NJ: Princeton University Press, 2005); and Jonathan Mercer, "Emotional Beliefs," International Organization 64 (Winter 2010), pp. 1–31.
- 63. University of Virginia, The Miller Center, Kremlin Decision Making Project, "Minutes #61 of 25 October 1962," http://web1.millercenter.org/kremlin/62_10_25.pdf. These documents are stenographic accounts of Soviet State Meetings.
- **64.** Norman Cousins, *The Improbable Triumvirate: John F. Kennedy, Pope John, Nikita Khrushchev* (New York, NY: Norton, 1972), p. 46.
- 65. Musharraf stated on June 17, 2002, that "in May 2002 we were compelled to show that we do not bluff." Celia W. Dugger, "The Kashmir Brink," New York Times, June 20, 2002, <www.nytimes.com/2002/06/20/world/the-kashmir-brink.html>.
- 66. Pervez Musharraf, former president of Pakistan, interview with author, Seattle, WA, March 14, 2010.
- 67. Cohen, When Proliferation Causes Peace.
- 68. Musharraf, interview with author. For South Asian perspectives on the Kargil war, see Ashok Krishna and P.R. Chari, eds., Kargil: The Tables Turned, (New Delhi: Manohar, 2001); Kargil Review Committee, From Surprise to Reckoning: The Kargil Review Committee Report (New Delhi: Sage, 2000); V.P. Malik, Kargil: From Surprise to Victory (New Delhi: Sage, 2000); and Y.M. Bammi, Kargil, 1999: The Impregnable Conquered (Noida: Gorkha, 2002).
- 69. For similar conclusions about Pakistani strategy in 2000, see Tellis et al, Limited Conflicts Under the Nuclear Umbrella, pp. 7, 30. Sponsoring the insurgency in Kashmir is also nuclear compellence because Musharraf believed that Pakistani nuclear weapons would have shielded Pakistan from Indian retaliation.
- 70. Karin Brulliard, "Pakistan's top military officials are worried about militant collaborators in their ranks," Washington Post, May 27, 2011, http://articles.washingtonpost.com/2011-05-27/world/35232078_1_ osama-bin-laden-raid-senior-pakistani-intelligence-ashfaq-kayani>; Jane Perlez and Salman Masood, "Terror Ties Run Deep in Pakistan, Case Shows," New York Times, July 27 2009 https://www.nytimes.com/2009/07/27/world/asia/27pstan.html; Manoj Joshi, "No closure as yet on Mumbai," Mail Today, November 24, 2010; "26/11 attacks: Lakhvi, Shah 'believed to have confessed," Indian Express, July 29, 2009 https://www.indianexpress.com/news/2611-attacks-lakhvi-shah-believed-to-have-confessed/495653/>; "Headley an ISI spy, groomed for 26/11 operation: US report," Pioneer, January 3, 2011, https://newindianexpress.com/world/article402442.ece?service=print>.
- Angel Rabasa, Robert D. Blackwill, Peter Chalk, Kim Cragin, C. Christine Fair, Brian A. Jackson, Brian Michael Jenkins, Seth G. Jones, Nathaniel Shestak, and Ashley J. Tellis, "The Lessons of Mumbai," RAND

Corporation Occasional Paper, 2009, p. 26; Jason Burke, "Mumbai spy says he worked for terrorists—then briefed Pakistan," *Guardian*, October 18, 2010, <www.theguardian.com/world/2010/oct/18/david-headley-mumbai-attacks-pakistan?>; "A monster we can't control: Pakistan's secret agents tell of links with militants," *The Times (London)*, December 22, 2008, <www.timesonline.co.uk/tol/new—cle5380189.ece>.

- 72. "Hoax caller who brought India, Pak on verge of war post 26/11 was Pearl's alleged assassin," *Asian News International*, November 26, 2009, http://m.mumbaimirror.com/index.aspx?Page=article§ name=News%20-%20World§id=4&contentid=200911272009112702142968755992417; "Army, PAF put on high alert after Indian threats," *The Nation (AsiaNet)*, November 29, 2008 https://www.nation.com.pk/pakistan-news-newspaper-daily-english-online/politics/30-Nov-2008/Army-PAF-put-on-high-alert-after-Indian-threats.
- 73. Steve Coll, "The Back Channel: India and Pakistan's secret Kashmir talks," New Yorker, March 2, 2009, www.newyorker.com/reporting/2009/03/02/090302fa_fact_coll>.
- 74. Rodney W. Jones, "Pakistan's answer to Cold Start?" Friday Times, May 13–19, 2011, <www.thefridaytimes.com/13052011/page7.shtml>.
- **75.** James M. Lindsay and Ray Takeyh, "After Iran Gets the Bomb: Containment and its Complications," *Foreign Affairs* 89 (March–April 2010), pp. 33–50, quotation appears on pp. 37–38.
- 76. Strictly speaking, President Obama has incentives to take such options off the table exclusively in regard to "rogue" nuclear powers. But such a policy might create incentives for other non-nuclear state leaders to develop nuclear weapons to obtain the same concession. A unilateral commitment to refrain from such attacks might overcome this problem. For an argument on why the United States should not use nuclear threats to deter weapons of mass destruction use by rogue leaders, see Scott D. Sagan, "The Commitment Trap: Why the United States Should Not Use Nuclear Threats to Deter Biological and Chemical Weapons Attacks," International Security 24 (Spring 2000) pp. 85–115.