

Chapter 1

Revisiting Strategic Stability

Focusing on Interactions between the Nuclear and
Sub-nuclear Levels of Conflict

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A U.S. military B-52 strategic bomber on June 17, 2021 (U.S. Air Force photo by Senior Airman Daniel Hernandez)

Strategic stability is undoubtedly one of the most central concepts in nuclear deterrence theory developed during the Cold War. The concept refers to a situation between nuclear-armed adversaries where two conditions are met: (1) neither side has an incentive to launch a nuclear first strike in a crisis, and (2) neither side has an incentive to expand nuclear arms.¹ In the process of the U.S.–Soviet negotiations on nuclear arms control in the latter half of the Cold War, this concept came to be regarded as the desirable state of nuclear deterrence between the superpowers.² Strategic stability and mutual vulnerability, the tangible reality on which strategic stability rests, have served as criteria to assess the good or bad of a particular strategic situation, weapons system, or strategy, and thus have been repeatedly referenced in the context of nuclear deterrence between the United States and Russia even in the post-Cold War era.³

Today, the context in which strategic stability is referred to is not limited to U.S.–Russian relations. The term “strategic stability” is used not only by the United Kingdom and France, nuclear powers allying with Washington, but also by China, which has refused to participate in U.S.–Russian arms control arrangements developed on this concept. India and Pakistan have also referenced strategic stability, while maintaining that they will not follow in the footsteps of the Cold War superpowers in nuclear policy. More recently, even North Korea uses this concept.⁴ In these contexts, strategic stability is referenced as a desirable strategic situation. Today, some describe the concept as “a common frame of reference for how nuclear weapons affect global peace and security.”⁵

On the other hand, Thomas Schelling, who had played a leading role in developing the idea of strategic stability from the late 1950s to the early 1960s, raised interesting questions in the foreword to a U.S. Army War College book published in 2013 that focused on reevaluations of strategic stability. One of the questions Schelling posed here was: “Is strategic stability always, usually, or seldom, a good thing?”⁶

The answer to this question depends on how one defines strategic stability, of which a common understanding is notoriously lacking. That said, it has long been argued that strategic stability based on mutual vulnerability can have negative implications in terms of the stability of overall deterrence relationship between nuclear-armed adversaries. In particular, there has always been an awareness of the issue of how strategic stability established at the nuclear level affects the sub-nuclear level (i.e., conventional level or below) of the conflict spectrum in a nuclear rivalry.⁷ One archetypal example is the stability-instability paradox, which holds that stability achieved at the nuclear level based on mutual vulnerability destabilizes lower levels of conflict between nuclear-armed adversaries.⁸

With nuclear deterrence returning to the fore of international politics in recent years, various issues of contention have emerged regarding strategic stability. Among these, the possible negative implications of strategic stability are undoubtedly an important issue. Many have pointed out that the stability-instability paradox is operating or is likely to arise in nuclear rivalries in the contemporary world, such as rivalries between the North Atlantic Treaty Organization (NATO) and Russia; between the United States and China; between the U.S.–Republic of Korea (ROK) alliance and North Korea; and between India and Pakistan.⁹ Moreover, the possibility that a confrontation at the sub-nuclear level, the occurrence of which can be explained by the paradox, could trigger nuclear escalation is stirring international concerns, as symbolized by the case of the Russo-Ukrainian War.

However, despite all of these debates, we still do not have a clear and sufficient answer to Schelling’s question on whether strategic stability is always a good thing. This is due, in part, to the lack of adequate theorization about what negative effects we can generally expect strategic stability to have on the stability of the overall deterrence relationship in nuclear rivalries in today’s context.

While there is a growing body of discussion on the negative effects of strategic stability in existing cases of nuclear dyads, scholarly attempts to create a general model of these effects whose relevance extends beyond individual cases have been far from adequate. We can point out two major problems in particular. First, with regard to the concept of the stability-instability paradox, which is regarded as one of the primary side effects of strategic stability today, scholars have failed to develop a clear and shared definition of the phenomenon, notwithstanding its wide usage.¹⁰ This problem is particularly prominent regarding the consequences of the paradox and the mechanism by which it operates.

Second, scholars are paying attention to how some nuclear powers, driven by their concerns about the (possible) manifestation of the paradox at the sub-nuclear level, have taken measures that increase the risk of actual nuclear use. Some of these measures could even directly undermine strategic stability at the nuclear level, which is a serious source of concern. However, few attempts have been made to determine the extent to which such moves represent a generally expected pattern beyond individual cases.

Against this backdrop, the following discussion in this chapter is primarily about the negative effects of strategic stability on the stability of the overall deterrence relationship of nuclear rivalries in the contemporary context. Specifically, this chapter presents a model that can have broad relevance in the context of contemporary nuclear dyads with respect to two questions: (1) how strategic stability based on mutual vulnerability affects the situation

at the sub-nuclear level of conflict; and (2) what are the implications of such effects, in turn, for the deterrence relationship at the nuclear level. Such a model can be useful not only for analyzing rivalries that have already been in a state of mutual vulnerability, but also for predicting the future course of relations that are moving toward this state, as well as relations involving new proliferators in the future.

In deriving such a model, one possible method is to inductively extract generalizable patterns by examining a wide range of relevant cases. However, existing cases of nuclear rivalries are not only diverse in form, but also limited in number. For this reason, there are certain difficulties in using induction to identify generalizable aspects—which might be applicable even to potential future cases—without being distracted by anomalies that appear in such a small sample.

Therefore, this chapter will study how strategic stability interacts with the sub-nuclear level of conflict in a deductive manner: examining the logic of relevant theoretical propositions developed in the Cold War era while taking into account the context unique to today's nuclear powers and rivalries. Cold War-era theories and concepts of nuclear deterrence have often been either rejected as completely irrelevant to the post-Cold War world, or, conversely, simply adopted “without due consideration.”¹¹ Both of these stances pose problems. While there are indeed significant differences between the bipolar world of the Cold War and today's great power relations, much of the existing theoretical knowledge in this area was developed in a deductive manner, which suggests that its applicability may go beyond the case of the superpowers. That said, the possibility cannot be entirely ruled out that its deductive reasoning was based on assumptions unique to the Cold War period. Also, even assuming the case neutrality of the logic of Cold War-era theory, today's discussion in this field often conflates what can be expected purely deductively from the deterrence theory with what was expected to happen in the Cold War era by applying the conditions of the U.S.-Soviet rivalry to the theory. This chapter seeks to remedy these issues and to improve the contemporary relevance of the existing theoretical knowledge on the abovementioned questions.

What this chapter can present by taking this approach will remain a theoretically derived hypothesis. The extent to which this hypothetical model is valid for contemporary nuclear rivalries will ultimately have to be tested by follow-up empirical studies of individual cases. Nevertheless, given the current lack of theoretical discussion on these questions, presenting such a theoretical hypothesis, which can serve as a basis for empirical works, is an important contribution to the nuclear literature.

This chapter will unfold as follows. First, Cold War-era debates over

strategic stability and the stability-instability paradox will be reviewed as a reference point for discussion in the contemporary context. Following this, the second section focuses on the function of the stability-instability paradox in the contemporary context: how strategic stability based on mutual vulnerability affects the situation at the sub-nuclear level of conflict. The third section examines what implications are brought to the deterrence relationship at the nuclear level when the paradox arises. Finally, the fourth and last section returns the focus to the stability-instability paradox itself, examining two topics: the limits of the destabilizing effects of the paradox and the function of the paradox under the condition that a conventionally superior nuclear power intends to challenge the status quo.

To these questions, this chapter makes the following argument. In today's nuclear rivalries, a stability-instability paradox can arise in which strategic stability based on mutual vulnerability creates leeway for conventionally inferior nuclear-armed revisionists to intensify their aggressive behaviors. The occurrence of the paradox can trigger a vicious action-reaction cycle in which nuclear-armed rivals pursue a variety of options for the limited use of military force, which implicates an increased risk of nuclear use, as well as some measures that have direct negative effects on strategic stability. In light of these points, strategic stability based on mutual vulnerability can be seen as having certain negative implications on the stability of the overall deterrence relationship between nuclear armed adversaries in the contemporary world.

Cold War-era Discussions

Conceptual Development of Strategic Stability

Before examining how strategic stability affects the situation at the sub-nuclear level of conflict, it is first necessary to understand what the establishment of strategic stability is meant to achieve. The concept of strategic stability was formed in the United States in the 1950s and early 1960s.¹² Subsequently, in the second half of the Cold War, Washington and Moscow gradually came to a common understanding that this was the desired state of their deterrence relationship.

Strategic stability is a concept notorious for the lack of a single, shared definition, which has become even worse since the end of the Cold War.¹³ That said, among nuclear deterrence and arms control experts, it has been largely agreed from the Cold War period to this day that strategic stability is a state in which its two subcomponents, crisis stability and arms race

stability, have been achieved.¹⁴ Of these two subcomponents, the former was regarded as the more important one.¹⁵ In particular, first-strike stability, a subset of crisis stability, lay at the core of the Cold War-era debates on strategic stability.¹⁶

A report published by RAND Corporation in the late 1980s defines first-strike stability as a situation in which “after considering the vulnerability of strategic [nuclear] forces on both sides, neither leader perceives the other as pressured by the posture of forces to strike first in a crisis.”¹⁷ This stability prevents either side from launching a preemptive nuclear strike out of fear of incurring a first strike from the other side and being put at a disadvantage.¹⁸ Crisis stability, according to this report, is an extension of this concept: whereas in first-strike stability, the incentive to launch a preemptive strike is defined solely by the nature and status of each side’s nuclear forces, in crisis stability, factors such as “emotion, uncertainty, miscalculation, [and] misperception” also play a role in determining the incentive (or lack thereof) to mount a preemptive nuclear strike.¹⁹ Meanwhile, arms race stability, the other pillar of strategic stability that was seen as supplementing crisis stability, was understood as a state in which neither side was pursuing strategic superiority through the buildup of forces, and thus “the costly and possibly deadly spiral of the arms race could be averted.”²⁰

In the Western strategic debate, these subcomponents were also given different meanings by different authors. However, what should be noted here is that these Cold War-era discussions of strategic stability focused narrowly on suppressing only a particular pathway to nuclear war: namely, reducing the risk that, in the event of heightened military tensions, one country would assume that nuclear war was inevitable and thus hastily launch a large-scale preemptive nuclear strike to reduce the damage it would suffer from a first strike by the other side.²¹ Schelling stated in the late 1950s: “We live in an era in which a potent incentive on either side—perhaps the main incentive—to initiate total war with a surprise attack is the fear of being a poor second for not going first.”²²

One reason that the idea of strategic stability evolved with a focus on preventing this kind of hasty preemptive strike was that its development was mediated by the fear of surprise attack, which was particularly acute in the first half of the Cold War.²³ When the U.S. nuclear monopoly was broken in the 1950s, the United States became increasingly apprehensive about the vulnerability of its Strategic Air Command (SAC)—the bedrock of its nuclear strike capability—to a surprise attack by the Soviet Union. This led Washington down the path of developing a less vulnerable strategic force, but since this entailed a great deal of time and cost, the immediate solution they settled on was to adopt a posture of mounting a preemptive strike at

the first sign that Moscow was preparing to strike. The Soviet Union, for its part, was keenly aware of the vulnerability of its own nuclear forces and the possibility of a surprise nuclear attack by the United States to exploit that vulnerability, which encouraged Moscow to develop a doctrine in the 1960s that envisioned a large-scale preemptive nuclear strike.²⁴

However, this process resulted in an extremely dangerous situation in which each side was wary of a surprise attack and was seeking to preempt an attack from the other side. Consequently, the United States and the Soviet Union began discussing measures to reduce the risk of surprise attacks.

Although these discussions themselves were not very fruitful, they did create an awareness among U.S. strategists of the importance of freeing not only Washington but also Moscow from the fear that the other side might be preparing a surprise attack. This resulted in the conception of strategic stability.

Strategic stability itself is an abstract proposition that does not presuppose any particular concrete situation in terms of nuclear strategies or forces of the concerned parties. But in Cold War discussions, this concept was associated with mutual vulnerability—or mutual assured destruction (MAD), a variant of mutual vulnerability—which was supposed to be the tangible reality on which stability would rest.²⁵ Vulnerability in this context did not refer to nuclear capabilities, but to the vulnerability of the societies or states of the contenders. A state of mutual vulnerability exists when neither side in a conflict is able to sufficiently destroy the other’s nuclear capability with a first strike, and thus each side is certain to suffer catastrophic damage from a retaliatory nuclear strike by the other. This vulnerability effectively removes the rationale for being the first to mount a nuclear attack and discourages either side from launching a surprise nuclear strike. This, in turn, eliminates the need for either side to rush into a hasty preemptive strike out of fear of incurring the other’s first strike.²⁶ As this logic was accepted, albeit gradually, by both sides, the question of how to achieve strategic stability between the superpowers effectively turned into the one of how to ensure a state of mutual vulnerability, where both sides had a second-strike capability that would allow them to launch a devastating retaliatory strike even after absorbing a first strike from their adversary.



U.S. Secretary of Defense Robert McNamara (in office: 1961–1968), who played a major role in establishing the concept of MAD (UIG/Jiji Press Photo)

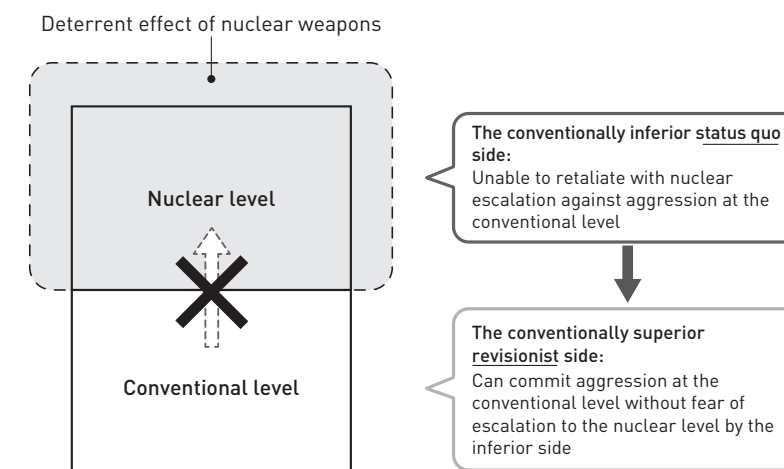
The arms control efforts pursued by the United States and the Soviet Union since the middle of the Cold War can be seen as attempts to “institutionalize” strategic stability based on mutual vulnerability.²⁷ In these efforts, mutual vulnerability became the ultimate criterion for determining the good or bad of particular types of nuclear targeting and weapons systems. Countervalue strikes targeting the population and industrial centers of an adversary were seen as consistent with mutual vulnerability, and thus weapons systems that could only serve this purpose, such as long-range ballistic missiles with low accuracy, were considered conducive to stability. Conversely, counterforce strikes targeting an enemy’s strategic nuclear forces, along with the interception of strategic nuclear strikes by the other side, were seen as jeopardizing mutual vulnerability, which led to the view that weapons systems suitable for these objectives—such as multiple independently targetable reentry vehicles (MIRVs) and strategic anti-ballistic missile systems—would be destabilizing.²⁸

Stability-Instability Paradox

As mentioned above, the primary focus of the concept of strategic stability, developed in the Cold War era, was to ensure first-strike stability. Hence, it was not intended to suppress all possible nuclear war scenarios between the superpowers, much less to envision a situation in which all pathways to East–West wars in general were blocked off. The limits of strategic stability in this regard were aptly summarized by Albert Wohlstetter and Stephen Prowse right before the end of the Cold War. According to them, the mainstream discourse on strategic stability at the time was problematic on two counts. Firstly, it was premised on the assumption that “the primary motive for one country to attack another springs simply from a misunderstanding that the other side might attack.” Secondly, its logic focused “solely on the binary relations between the United States and the Soviet Union,” which meant that achieving the stability would make it difficult for NATO to deter the Warsaw Pact’s nuclear and non-nuclear aggression against Western European allies.²⁹

The stability-instability paradox, which is often cited today as the primary negative implication brought about by the establishment of strategic stability, was originally raised in this context. The most widely cited source on the idea of the paradox is Glenn Snyder’s 1965 piece. Regarding interactions between the nuclear level (“balance of terror”) and the conventional level (“balance of power”) in the U.S.–Soviet/West–East deterrence equation, Snyder observed that “the greater the stability” of the former, “the lower the stability of the overall balance at its lower levels

Figure 1. The function of the paradox presented by Snyder



Source: Prepared by the author based on discussion in Snyder, “The Balance of Power and the Balance of Terror.”

of violence,” and that “if neither side has a ‘full first-strike capability,’ and both know it, they will be less inhibited about initiating conventional war, and about the limited use of nuclear weapons, than if the strategic balance were unstable.”³⁰

Snyder’s argument was premised on the strategic environment in Europe during the Cold War. The Western strategic debates at the time assumed the conventional superiority of the Warsaw Pact on the European front, which forced NATO to rely on the threat of U.S. nuclear retaliation against the Soviet homeland to deter any Soviet aggression, including a conventional invasion against Western Europe, in the early stage of the Cold War. The Massive Retaliation strategy announced by the U.S. Dwight Eisenhower administration in 1954 was an embodiment of this approach. However, as the Soviet Union’s nuclear capability grew, consolidating the state of mutual vulnerability, implementing this threat became suicidal for the United States. This sparked Western fears that the perceived erosion of the credibility of the American threat of nuclear retaliation vis-à-vis non-nuclear aggression might destabilize the sub-nuclear level of the East–West deterrence relationship, encouraging the Pact’s conventional onslaught against Western European countries.³¹

While this argument was presented as an illustration of Western strategic concerns, it also represented the theoretical dilemma that arises in the pursuit of strategic stability. The situation of mutual vulnerability

on which strategic stability rests significantly reduces the rationality of resorting to any use of strategic nuclear weapons—not only ones intended to neutralize the adversary's strategic retaliatory capabilities, but also ones striking countervalue targets in the adversary's homeland in retaliation for conventional aggression—unless faced with first use by an adversary. The reasoning is straightforward: the use of strategic nuclear weapons, which would surely invite a similar retaliatory nuclear strike from the other side, is tantamount to an act of suicide. As a result, (strategic) nuclear weapons, which ensure deterrence at the nuclear level of the conflict spectrum, cannot exert a deterrent effect on the sub-nuclear level. This effectively means that the situation at the sub-nuclear level, including the conventional level, becomes quite close to a situation in which neither side possesses nuclear weapons. If there is a conventional imbalance in this situation, the conventionally superior side will have leeway to exercise its superior conventional might without being bothered by nuclear deterrence.³²

During the Cold War, it was the conventionally inferior West that was supposed to be on the receiving end of the paradox. There were huge debates in the West at the time about whether the Warsaw Pact would actually resort to conventional aggression in line with this logic and how the Western allies should deal with the risk. People who took the risk of Soviet conventional aggression seriously advocated bolstering deterrence. Charles Glaser classified these arguments into two schools of thought.³³ One was the damage limitation school. This school sought to restore the credibility of the threat of nuclear retaliation vis-à-vis large-scale conventional aggression by overcoming mutual vulnerability through the acquisition of a damage limitation capability that combines preemptive nuclear counterforce strikes with strategic defense. The other position, called the military denial school, accepted the state of mutual vulnerability and sought to ensure the effectiveness of nuclear deterrence against conventional aggression by enabling fighting and winning a limited nuclear war through a wide range of calibrated nuclear options, while avoiding full-scale nuclear escalation.

Although these two schools differed in their stances on mutual vulnerability, they both sought to restore the deterrent effect of nuclear weapons at the sub-nuclear level by making Western first use of nuclear weapons less irrational. Their arguments, especially those of the damage limitation school, contained elements at odds with strategic stability. The state of mutual vulnerability, from which the damage limitation school hoped to break away, was the very basis of strategic stability. Hence, should it be achieved, it would jeopardize strategic stability, especially first strike stability at its core.

On the other hand, there was also the argument of the punitive

retaliation school, which Glaser contrasted with these two schools. This argument accepted mutual vulnerability as the basis for the superpower deterrence relationship and asserted that no special measures to enhance the perceived rationality of Western nuclear first use were needed to deter sub-nuclear aggression expected by the paradox. Its premise was the recognition that even the slightest risk of escalation to all-out nuclear war—which could happen even if neither side wanted it—could have a significant deterrent effect beyond the nuclear realm, which would be sufficient to deter the Warsaw Pact's conventional aggression against Western Europe.

Western debates over the seriousness of the threat of conventional aggression from the East and the best approach to deal with this risk were never fully resolved during the Cold War. The logic of the punitive retaliation school supported the pursuit of nuclear arms control to achieve strategic stability. Meanwhile, the arguments of the damage limitation and military denial schools also remained influential, and thus were reflected in the various nuclear use options espoused in successive Western nuclear strategies.³⁴

Theory Versus Reality during the Cold War

The concepts of strategic stability and the stability-instability paradox, which evolved against the backdrop of the superpower rivalry, have been referenced repeatedly up to the present. However, some caveats are necessary when we look back today on these Cold War discussions.

First, despite strong Western concerns, the West's worst fears anticipated by the logic of the paradox did not materialize. As noted by Snyder, in the Western strategic literature at the time, the stability-instability paradox was supposed to undermine the credibility of the threat of nuclear retaliation against aggression below the (strategic) nuclear level, thereby allowing the conventionally superior side to use its conventional might without fear of nuclear retaliation.³⁵ Nevertheless, large-scale conventional aggression against Western Europe by the Warsaw Pact forces never materialized as the paradox suggested it would.³⁶

Why the East did not conventionally invade Western Europe has been controversial among scholars—even whether the Soviet Union had any revisionist intentions at all is debatable. However, it should be noted here that, in the Cold War era, there was a widely shared understanding in the United States that its strategic nuclear forces were playing at least some role in deterring the Warsaw Pact's aggression against Western Europe, in spite of a situation of mutual vulnerability.³⁷

According to Snyder's theoretical formulation of the stability-instability

paradox, a state of mutual vulnerability should undermine the effectiveness of the nuclear threat in deterring aggression at the conventional level and below, while ensuring strategic stability, a stable deterrence relationship at the nuclear level. However, what the above understanding suggests is that, in reality, even when the nuclear level is in a state of mutual vulnerability, a deterrent effect arising from the nuclear weapons of the adversaries can be exerted on the sub-nuclear level and discourage some actions, including large-scale conventional attacks.

Meanwhile, although aggression by the Eastern bloc against Western Europe did not occur, the concern that it might served as one of the primary drivers of the superpower arms race, which had negative implications on strategic stability. Neither Washington nor Moscow fully embraced the idea of mutual vulnerability during the Cold War. As already mentioned, even after Washington began its pursuit of strategic stability, the United States, concerned about the implications of the paradox, still sought options that could make its nuclear use “rational”—counterforce strike capabilities for damage limitation and limited nuclear options, in particular.³⁸ The Soviet Union, for its part, saw such U.S. moves as preparations for a nuclear first strike. Moreover, Moscow did not see mutual vulnerability as a desirable goal in itself, and in Soviet military strategy deterrence remained based on the ability to win a nuclear war.³⁹ As a result, the Soviet Union sought to limit the damage it would sustain in the event of nuclear war by acquiring a more powerful counterforce strike capability and strategic defense than the United States.⁴⁰

Given the vast numbers of nuclear warheads that the two superpowers eventually accumulated, it is debatable whether, even with a vigorous effort to achieve a damage limitation capability, the crisis stability of their deterrence equation could have been affected in any meaningful way.⁴¹ However, such moves were clearly problematic in terms of arms race stability. The direction of the nuclear force buildup by both sides, which entailed elements of damage limitation, was nothing other than a quest for strategic superiority that spiraled into an arms race.⁴²

Discussion in the Contemporary Context: Implications on the Sub-nuclear Level

Having covered the Cold War discussions, this chapter will move on to the implications of strategic stability in the context of contemporary nuclear rivalries. First, this section will discuss the stability-instability paradox, especially focusing on how it works in today’s circumstances.

The Stability-Instability Paradox between India and Pakistan

The concept of the stability-instability paradox is being actively cited today in the context of various nuclear rivalries. Most recently, this trend is particularly prominent in studies on NATO–Russia relations since the start of the Russo-Ukrainian War.⁴³ That said, the paradox has also been mentioned in the context of the rivalry between the U.S.–ROK alliance and North Korea, the United States and China, and even a potentially nuclearized Iran and Middle Eastern countries with the backing of Washington. Many of these discussions refer back to Snyder’s formulation of the paradox, presented in the 1960s.⁴⁴

Having said this, interest in the stability-instability paradox has not been consistently high in security debates in general from the Cold War period to the present. At least from the end of the Cold War through the mid-2000s, interest in nuclear deterrence among great powers waned, and the concept of the paradox was not as widely mentioned as it is today.

Against this backdrop, the only place where the stability-instability paradox continued to be discussed was South Asia: the India–Pakistan rivalry, which has been seen as a pioneering case of post-Cold War nuclear deterrence relationships. Both India and Pakistan are believed to have attained de facto nuclear status in the late 1980s, and in May 1998 both declared their possession of nuclear weapons overtly with a series of nuclear tests. Although no conventional war has occurred between India and Pakistan since their nuclearization, violence has continued at lower levels of the escalation ladder. In particular, Pakistan’s proxy war against India—supporting insurgency and terrorism in India—and its lower-level tactical aggression along the Line of Control in the disputed Kashmir region were observed to be intensifying from the 1990s to the early 2000s.

The stability-instability paradox was pulled out to explain this contradictory situation in the subcontinent, where mutual nuclear deterrence at the strategic level coexisted with violence at the lower levels of the conflict spectrum. Beginning with Sumit Ganguly’s article in 1995,⁴⁵ a number of studies emerged from the late 1990s to the 2000s that applied the stability-instability paradox to the situation in nuclear South Asia.⁴⁶

In concrete terms, what these discussions saw as a manifestation of the paradox was the strategy of Pakistan, the conventionally weaker side. Islamabad was seen as intensifying its challenges to the status quo at the sub-conventional level of the escalation ladder, while leveraging nuclear deterrence to deter India from responding with its superior conventional might to Pakistan’s lower-level actions.⁴⁷ Contemporary discussions that cite the stability-instability paradox tend to portray an image of a conventionally

inferior state attempting to change the status quo in its favor while leveraging nuclear weapons as a shield, as in the case of North Korea against the U.S.–ROK alliance and Russia against NATO.⁴⁸ The prototype for this image can be found in the case of Pakistan, not the Soviet Union in the Cold War era—there was no need for the conventionally stronger Soviet to utilize nuclear weapons as a deterrent against the use of conventional forces by the West.

However, S. Paul Kapur's article, which can be seen as an important milestone among studies of the paradox in the South Asian context, pointed out that this image of a conventionally weaker revisionist exploiting the paradox could not be explained by the logic of the Cold War-era paradox presented by Snyder. Kapur took issue with the fact that while scholars at the time mostly agreed that the paradox was responsible for the lower-level violence in nuclear South Asia, they did not explain the mechanism of "how the phenomenon has actually caused such violence."⁴⁹ He then argued that the structure of stability and instability that generated the paradox in the Cold War is "reversed" in the subcontinent.⁵⁰

As suggested by the understanding of the paradox in the Cold War era, the stabilization of deterrence at the nuclear level, which makes nuclear escalation from conventional warfare irrational and thus reduces its likelihood, erodes the effectiveness of Pakistan's nuclear threat in deterring India from exercising its superior conventional forces. It is too dangerous for Pakistan to engage in serious lower-level violence under these conditions, because India would not hesitate to escalate the situation into a conventional war and strike back. Rather, what is required for Pakistan's lower-level aggression to be facilitated is exactly the reverse: contrary to the assumption of Snyder's paradox, there must be a serious possibility that a large-scale conventional war, if it occurs, will lead to a nuclear war. Only under such conditions would a conventionally inferior Pakistan be able to engage in lower-level violence in the expectation that India would not resort to a serious conventional counterattack that would turn the situation into a major conventional war.⁵¹ This is the logic of the paradox posed by Kapur, which facilitates conventionally inferior Pakistan's challenge to the status quo.

Conventionally Inferior Revisionists and the Paradox

Notwithstanding Kapur's attempt at theoretical refinement, the concept of the stability-instability paradox employed in the context of the India–Pakistan rivalry has still remained conceptually ambiguous, lacking a single, shared definition.⁵² Meanwhile, from an empirical perspective, some have questioned the utility of this proposition in understanding Pakistan's

behavior, given Islamabad's record of engaging in this kind of low-intensity conflict against India since far before its nuclear possession.⁵³ However, the theoretical works accumulated in the context of studies on subcontinental nuclear dynamics can serve as a starting point for discussing how the stability-instability paradox works in contemporary nuclear rivalries in general.

As noted by Kapur, while the logic of the stability-instability paradox posited by Snyder during the Cold War works in favor of a conventionally superior revisionist power, in the Indo-Pakistani conflict the paradox is understood as having benefited Pakistan, the conventionally inferior revisionist in this dyad.⁵⁴ The latter image has been more relevant in today's nuclear discourse, because, with the sole exception of recent U.S.–China relations, all of the contemporary nuclear rivalries where the stability-instability paradox has been invoked have involved a revisionist state with a clear conventional inferiority vis-à-vis the enemy state or camp.⁵⁵ This point raises the need to focus on the function of the latter paradox—namely, how mutual vulnerability as a basis for strategic stability works to destabilize the sub-nuclear level of conflict in favor of weaker revisionists.

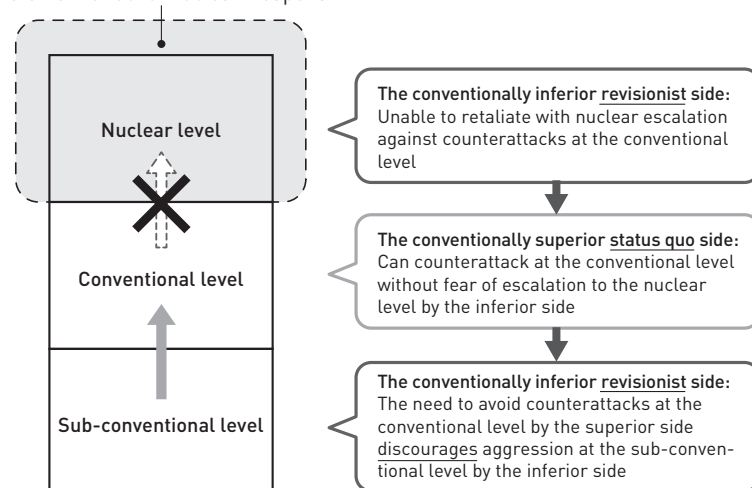
In this version of the paradox, its "destabilizing" effect comes from the fact that the revisionist side, placed under the state of mutual vulnerability, leverages the risk of nuclear escalation to restrict the other side's response options at the sub-nuclear level. At the sub-nuclear level, the status quo side would be inhibited from taking a forceful retaliatory action as it would in the absence of nuclear weapons, leaving the revisionist side with less need to fear a conventional counterattack. This creates leeway for the revisionist side to intensify its aggressive behaviors to challenge the status quo, meaning that the conflict dynamics at the sub-nuclear level undergo changes influenced by the deterrence relationship at the nuclear level, which is in a state of mutual vulnerability.

That said, as we saw in the Cold War discussions, mutual vulnerability was originally understood as significantly reducing the rationality of using nuclear weapons in retaliation for actions at the sub-nuclear level. Therefore, the revisionist side exploiting the paradox must credibly demonstrate the risk that a military response by its adversary, implemented in response to the revisionist's initial aggressive action, will lead to nuclear escalation, despite the original implications of mutual vulnerability. How serious the consequences of the paradox can be depends on how effectively this risk can be posed.

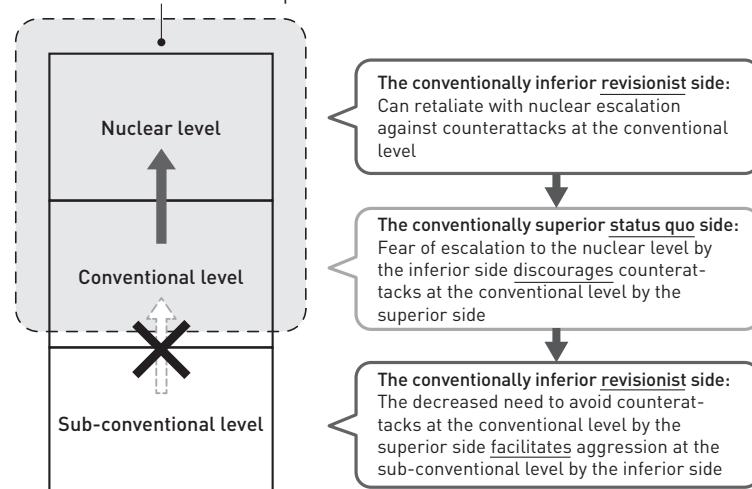
It is on this point that the key to Kapur's argument—that the revisionist power is inferior in conventional forces—makes a difference. Strictly speaking, a conventional imbalance is not an absolute necessity for the paradox to

Figure 2. The stability-instability paradox in the Indo-Pakistani conflict**(1) Function of the paradox in the Indo-Pakistani conflict as expected under Snyder's logic**

Deterrent effect of nuclear weapons

**(2) Function of the paradox in the Indo-Pakistani conflict as presented by Kapur**

Deterrent effect of nuclear weapons



Note: In Kapur's discussion, the levels are referred to as the nuclear level/full-scale conventional conflict level/limited conventional conflict level, but here the levels are described as the nuclear level/conventional level/sub-conventional level, in accordance with the designations used in this chapter.

Source: Prepared by the author based on the discussion in Kapur, *Dangerous Deterrent*.

work in this manner. There may be other forms of leverage that can be used to pose the risk of escalation from the sub-nuclear level, and in the first place, the possibility of nuclear escalation cannot be entirely ruled out when a large-scale conventional war between nuclear powers occurs, regardless of the balance of conventional forces. However, for a revisionist power, its own clear conventional inferiority vis-à-vis the adversary enables it to pose the risk of escalation from the sub-nuclear level more easily and effectively. After all, when a state's national survival is at stake in a conventional war, it could be rational for the state to resort to nuclear retaliation in response to an adversary's conventional onslaught, despite knowing that such strikes would surely invite massive nuclear counter-retaliation.⁵⁶ Leveraging this possibility of "rational nuclear escalation," the revisionist can more effectively restrict the status quo side's conventional options with nuclear deterrence. In turn, such reduction of the risk of facing a grave conventional counterattack creates leeway for the revisionist to take actions that would be inconceivable in the absence of nuclear weapons.

That said, even though the status quo side is constrained in its conventional response to lower-level aggression, there are limits to the degree of that constraint. Since the revisionist side also does not actively desire nuclear war, the threat of "rational nuclear escalation" cannot deter the other side from taking any kind of response at the sub-nuclear level. In particular, it would be difficult to deter counterattacks that are proportional in nature and gravity to the initial action committed by the revisionist side. A scenario in which such counterattacks lead to tit-for-tat violence and result in a conventional war is what a conventionally weaker side would hope to avoid, given the conventional asymmetry.

In light of these considerations, it is safer for a weaker revisionist to challenge the status quo with actions at the sub-conventional level, which is lower on the escalation ladder than the conventional level. For example, tactical and localized probing on the front lines of disputed territories, the use of paramilitary forces, or proxy wars using non-state actors may be employed. Alternatively, certain forms of conventional-level actions, which can be considered equivalent to sub-conventional warfare in terms of the risk of escalation to the higher level, may be chosen, such as a conventional aggression targeting a partner state—especially a marginal partner, rather than a treaty ally—of the conventionally superior nuclear-armed adversary, instead of the adversary itself.⁵⁷

With these in mind, the consequence of the stability-instability paradox can be summarized as creating leeway for the conventionally inferior revisionist side to increase the frequency and intensity of aggressive behaviors in such forms. Of course, it is up to the revisionist power to decide whether

to actually take advantage of this leeway and ramp up its challenge to the status quo.⁵⁸ But if it does, the situation will literally be a nuclear-level deterrence relationship in a state of mutual vulnerability, which serves as the basis of strategic stability, causing destabilization at the sub-nuclear level.

The function of this paradox is consistent with the concern raised by discussions citing the paradox in the contemporary context—that the establishment of mutual vulnerability encourages conventionally inferior revisionist states (not limited to Pakistan) to take unprecedented or more aggressive actions than before.⁵⁹ What should also be noted here is that the existence of a conventionally inferior revisionist power is likely to continue to be a defining feature of contemporary nuclear rivalries, although this may not be true in all cases. This is suggested not only by the continued existence of nuclear-armed states in this category—Pakistan, North Korea, and Russia—but also by the fact that nuclear weapons are now widely seen as a powerful equalizer for conventionally inferior nations.⁶⁰ Hence, the stability-instability paradox, which enables a conventionally weaker revisionist to intensify its challenge to the status quo, can be seen as a widely observable phenomenon in the context of contemporary nuclear rivalries.

Discussion in the Contemporary Context: Implications on the Nuclear Level

When, in today's nuclear rivalries, the paradox works to intensify the lower-level aggression of a conventionally inferior revisionist power, what reactions can logically be expected from the other side of the rivalry? And what are the implications of such action-reaction dynamics for the stability of the deterrence relationship at the nuclear level? This section will focus on these points.

Competition over the Nuclear Threshold and the Risks of Limited Nuclear Use

For the state of mutual vulnerability at the nuclear level to benefit the weaker revisionist challenging the status quo, the deterrent effect of its nuclear weapons must extend to at least parts of the sub-nuclear level of the conflict spectrum, thereby inhibiting the status quo power from staging a conventional-level counterattack that might be possible in the absence of nuclear weapons. However, since the revisionist side does not actively desire nuclear war either, there is always a limit to the kind of counterattacks that can be constrained by the threat of nuclear escalation.

Therefore, it is natural for a status quo power faced with intensifying violence at the lower-level of the escalation ladder to pursue conventional retaliatory options that leverage its superiority as much as possible without inviting nuclear retaliation, rather than simply renouncing conventional responses. In other words, it will search for limited conventional war options. Specific measures include developing a doctrine and tactics and acquiring capabilities to enable such operations, as well as signaling its conviction that such a calibrated use of military force is entirely possible without triggering nuclear escalation.⁶¹ This is an attempt to test—or even push up—the limits of the nuclear threshold of the inferior side.⁶²

On the other hand, if the status quo side makes such moves, the inferior revisionist side, which stands to benefit from a situation in which the deterrent effect of nuclear weapons extends to the sub-nuclear level, is likely to try to either prevent its own nuclear threshold from being pushed up or to even lower the threshold. Of course, little credibility is gained by simply reiterating the threat of nuclear retaliation against limited conventional operations. Rather, a more viable measure to lend credibility to such threats is to signal a lowering of the nuclear threshold with the introduction of non-strategic nuclear weapons (NSNWs) as a means of enabling limited nuclear use that carries a relatively low risk of immediate escalation to all-out nuclear war. Tactical nuclear weapons (TNWs) are a typical example of this.

Such tit-for-tat moves increase the risk that nuclear weapons will actually be used. The introduction of NSNWs by the conventionally inferior side raises the hurdle for the use of conventional forces by the superior side, but it does so precisely by setting the stage for the earlier and more certain use of nuclear weapons in the event of a conventional war. At the same time, the superior side's pursuit of the maximum possible response options it can exercise without inviting nuclear retaliation increases the likelihood that the lower-level violence committed by the weaker revisionist will lead to conventional war. Although such responses are supposed to be calibrated so as not to provoke nuclear retaliation, there is always the risk that the superior side could misread the other side's redline and trigger early nuclear use by the inferior side. This risk increases, whether proportionately or not, as the possibility of the superior side resorting to a conventional response increases.

In addition, these moves constitute a security dilemma. When the conventionally superior side seeks to maximize its conventional response options in this way, its goal is to deter the revisionist side from exploiting the paradox and challenging the status quo. However, since the revisionist is inferior in conventional terms, the superior side's search for conventional options not only affects the revisionist power's cost-benefit calculations in engaging in revisionism, but also aggravates the revisionist side's sense

of vulnerability. If this leads the inferior revisionist state to take actions that indicate a lowering of its nuclear threshold, the status quo side may perceive these moves as doubling down on aggression, rather than strengthening deterrence against conventional retaliation—regardless of the actual intention of the weaker side. This is a classic security dilemma, which makes it even more difficult for both parties to break away from the vicious action-reaction cycle.

Implications for Strategic Stability

The increased risk of nuclear use as a result of such a pursuit of limited options by both sides is primarily related to the use of NSNWs. Therefore, it does not immediately imply the erosion of strategic stability, which is basically the state of the deterrence relationship with respect to strategic nuclear forces. It is not impossible to envision a situation in which, as a result of the establishment of robust mutual vulnerability, the nuclear level of the conflict spectrum splits into strategic and non-strategic nuclear levels, with strategic stability being assured at the former level while limited nuclear use through NSNWs occurs at the latter level.⁶³

However, even if one assumes that the use of NSNWs is not in itself a strategic stability issue, the pursuit of limited options by both sides, along with the intensification of lower-level violence in accordance with the paradox, can be expected to have negative impacts on strategic stability. This section raises the following three points in this regard.

(1) Adverse Effects on Arms Race Stability

Firstly, arms race stability may be undermined when both the stronger status quo and the weaker revisionist sides pursue respective limited options. Given the complementary relationship between arms race stability and crisis stability, arms buildups that are problematic in terms of arms race stability are, strictly speaking, those that threaten the second-strike forces of either side, thereby undermining the basis of mutual vulnerability at the strategic nuclear level—such as counterforce capabilities and strategic defense systems. Since the Cold War era, however, some have viewed arms races in general as problematic because they can increase the likelihood of war by amplifying mutual hostility and fear, even if the race itself has no chance of eroding mutual vulnerability.⁶⁴ In terms of this viewpoint, an arms race that occurs below the strategic nuclear level would also carry political risks, although its impact would be limited compared to those involving both sides' strategic weapons systems.

Moreover, while the distinction between strategic and non-strategic

weapons, as well as between weapons intended to target an adversary's nuclear retaliatory capability and those that are unintended, may be conceptually clear, it inevitably becomes blurred when applied to reality. The case of the U.S.–Soviet/Russian rivalry, where there is sufficient distance between the primary contenders and the distinction between strategic and non-strategic weapons has historically been established based on their particular circumstances, is rather exceptional. Problems can arise when there is no such agreed-upon distinction and the rivals are contiguous. For instance, it is quite possible that TNWs and other low-yield, short-range weapons intended for limited nuclear use can also target an adversary's strategic second-strike forces. Highly accurate missiles are suitable not only for calibrated nuclear use but also for disarming counterforce strikes to neutralize enemy strategic forces.

Hence, the acquisition of NSNWs can be perceived by the other side as a threat to its own second-strike capability, even if they are not intended to be used in that way. In this case, not only would it create problems for crisis stability, but it would also create doubt and mistrust on the other side about one's intention to accept the state of mutual vulnerability, thereby undermining arms race stability.

(2) Limited Nuclear Use and Crisis Stability

Secondly, the relationship between the risk of the actual use of NSNWs and strategic stability may pose another issue. How the use of NSNWs relates to the maintenance of strategic stability is a tricky question. On the one hand, it can be said that, despite their classification as “non-strategic,” their actual employment undoubtedly constitutes nuclear use and thus increases the likelihood of escalation to strategic nuclear war, which is what strategic stability seeks to prevent. On the other hand, as articulated by Snyder, the limited nuclear use of NSNWs can also be seen as an option that becomes employable when robust strategic stability exists.

This point is closely related to the question of the role played by NSNWs. The reason why this type of nuclear weapon is sought separately from strategic weapons under conditions of mutual vulnerability is that it enables limited/calibrated nuclear use that generates a relatively subdued impact, which satisfies two conditions: (1) it can be clearly distinguished from the use of strategic nuclear weapons as a means of all-out nuclear war; and (2) it does not provoke the adversary to respond with escalation to the use of strategic nuclear weapons. However, the specific manner in which NSNWs are employed can be divided into two approaches, which presuppose different views about the nature of nuclear escalation.⁶⁵

One approach, which presumes that the risk of uncontrollable escalation

to all-out nuclear war is extremely limited, is to use limited nuclear options as tools to inflict pain on an adversary and force it to back down to avoid further damage accumulation. For this approach to be viable, escalation between the strategic and non-strategic nuclear levels of the conflict spectrum must be strictly blocked, which requires the consolidation of strategic stability based on robust mutual vulnerability at the strategic nuclear level. The use of TNWs in the course of conventional warfare for purely military utility can be regarded as a variant of this approach in that it assumes that the risk of escalation to all-out nuclear war is subdued.⁶⁶ This approach effectively seeks a posture capable of conducting and winning a limited nuclear war, which serves as a deterrent by demonstrating the ability for warfighting.

This approach, however, entails some problems. It inevitably raises the question of whether it is possible to contain escalation once nuclear war has been initiated. Moreover, this approach requires a substantial arsenal of NSNWs to enable a wide range of limited nuclear uses against a large variety of targets, along with robust strategic nuclear forces to sustain strategic stability.⁶⁷ Meeting this requirement would be a major challenge, especially for emerging nuclear powers that lack adequate resources.

In contrast, the other approach is less demanding in terms of capability.⁶⁸ This approach is to use limited nuclear options as a means to raise and manipulate the risk of explosive, uncontrollable escalation to all-out nuclear war. It relies on the exact opposite premise of the first approach regarding the nature of nuclear escalation: that there must always be a serious possibility of uncontrollable escalation to all-out nuclear war, even if neither side hopes it, once a nuclear war is started, whether by limited or large-scale nuclear use. Under this premise, non-strategic weapons ensure deterrence by serving two contradicting roles simultaneously. On the one hand, their existence lowers the bar—in the adversary's eyes—for their possessor to cross the nuclear threshold, because their use is understood to entail relatively less risk of immediately leading to all-out nuclear war. Meanwhile, the possibility of the use of NSNWs poses the indelible risk of uncontrollable nuclear escalation, due to their classification as nuclear weapons. Should deterrence fail, their actual use would be intended to manipulate the risk of uncontrollable escalation into a strategic nuclear exchange, thereby forcing the other side to back down to avoid the disaster.⁶⁹

What should be noted here is that this risk-based approach is incompatible with a robust state of crisis stability. Although it exploits the possibility of escalation to all-out nuclear war which neither side desires, the impact of the use of NSNWs is itself limited by nature. Therefore, for this approach to be viable, there must be a reasonable probability that, somewhere in the sequence of events following the use of NSNWs, a deliberate decision

will be made by either side to resort to a strategic nuclear strike in spite of the situation of mutual vulnerability, thereby inciting escalation to all-out nuclear war. However, the pressure to launch a hasty preemptive nuclear strike to avoid the other side's first strike, which crisis stability is intended to suppress, is a major, if not the only, factor that can rationally drive a state to such an irrational decision, knowing that its consequence is strategic nuclear war.⁷⁰

Given the capabilities required by each approach, it is quite possible that revisionist nuclear powers in the contemporary context will adopt the latter regarding the role of NSNWs.⁷¹ In that case, however, those countries may, as a deliberate choice, prefer to maintain a certain level of crisis instability. This then has direct bearings on strategic stability.

(3) Temptation for Damage Limitation

Thirdly, the intensification of lower-level aggression under the operation of the stability-instability paradox may, under certain conditions, encourage the status quo powers on the receiving end of such actions to pursue a damage limitation capability at the strategic nuclear level. This can conflict with crisis stability.

What may drive the status quo sides to pursue such capabilities is a desire to “eliminate” the basis of the paradox—the same rationale on which the Cold War-era damage limitation school rested. Although the paradox that was feared back then and the paradox likely to operate in contemporary nuclear rivalries differ in their expected outcomes, they converge on the fact that both arise under conditions of mutual vulnerability. Theoretically, therefore, overcoming the paradox by breaking out of mutual vulnerability through the acquisition of a damage limitation capacity can also be relevant today.

Of course, compared to the case of the Cold War, where the aggression expected by the paradox was supposed to occur at the highest end of the sub-nuclear level, the sub-conventional challenges arising under the paradox today are further away from the nuclear level on the spectrum of conflict. Thus, in the contemporary context, it may not be a priority choice for status quo powers to eliminate the basis of the paradox by breaking out of mutual vulnerability at the strategic nuclear level. That said, in some cases of nuclear rivalry today, the basis for mutual vulnerability is less robust because of the significant gap in the rivals' second-strike capabilities. In such circumstances, seeking and achieving an effective damage limitation capability can be a reasonably realistic option for at least the superior side.⁷² Hence, if the status quo side, faced with lower-level challenges, believes that it has a chance of achieving an effective damage limitation capability, it may have an incentive

to break out of the situation by actually pursuing such a posture.

If, under such conditions, the side with superior nuclear and conventional capabilities outright pursues a damage limitation strategy, this will create more serious problems than during the Cold War in terms of first-strike stability. As the goal of achieving meaningful damage limitation—which, at least in retrospect, was a dubious goal during the Cold War—by the superior side becomes more feasible, the other side's fear of a first strike will be aggravated in the event of heightened tensions. This fear, as some scholars suggest, can encourage the adoption of a posture that enables launching nuclear forces immediately in the event of a crisis.⁷³

Further Examination on the Stability-Instability Paradox

On the basis of what was discussed in the previous sections on the negative effects brought about by strategic stability in the contemporary context, this final section returns the focus back to the stability-instability paradox. It examines two topics: (1) the limits of the destabilizing effects of the paradox, and (2) the function of the paradox under the condition that the conventionally superior side seeks to alter the status quo.

Limits and Constraints of the Paradox

This chapter has demonstrated that strategic stability based on mutual vulnerability can have various negative implications on the overall stability of nuclear rivalries in the contemporary context. In generating such implications, the stability-instability paradox occupies a key position as the starting point of the vicious cycle mentioned above. This naturally raises a question: what are the limits of aggressive behaviors that can be taken by the revisionist power operating under the paradox? Also, is there any way for the status quo side to constrain such behaviors without causing negative effects on stability at the nuclear level?

In the second section, this author argued that, under the paradox, a conventionally inferior nuclear-armed revisionist is likely to challenge the status quo with actions at the sub-conventional level or certain conventional-level actions that can be considered equivalent to sub-conventional means in terms of the risk of further escalation, such as conventional aggression against a marginal partner of the conventionally superior adversary. The reason given there was that because there are certain limits to the degree to which the revisionist state can constrain the other side's counterattacks to its aggressive behavior, the revisionist must manage the risk that such

counterattacks will lead to a tit-for-tat exchange and then escalate into conventional war.

Theoretically, the existence of such limits in aggressive actions enabled by the paradox can be expected from Schelling's bargaining theory, which sees limited war as a kind of implicit bargaining. In general, for a certain limit on war to be established, a common understanding of the level of the limit must first be reached. That said, because this common understanding is negotiated implicitly, the level of the limit must settle at a "mutually identifiable resting place," which implies a qualitative, not quantitative, distinction. Certain points on a qualitatively identical continuum do not meet this condition, making it difficult for mutual expectations to converge there.⁷⁴ This logic suggests that, if a counterattack by the status quo side—triggered by an initial lower-level action by the revisionist—leads to a tit-for-tat exchange and then escalates to a conventional-level confrontation, it would be extremely difficult to control further escalation from there to an all-out conventional war, which differs only in quantitative terms. Therefore, a safe bet for a conventionally inferior revisionist in challenging the status quo is to calibrate the nature of its initial action to ensure that, even if it triggers a proportional counterattack from the adversary and leads to an exchange, the resulting situation will remain qualitatively different from that of conventional war.

It is on this rationale that a weaker revisionist challenging the status quo under the paradox can be expected to prefer actions at the sub-conventional level, which are qualitatively different from the ones at the conventional level. Examples of such actions that easily come to mind are the use of paramilitary organizations or non-state actors, but any actions that meet the condition of being qualitatively different from conventional-level ones between the adversaries themselves can be employed.⁷⁵ In addition, this logic also suggests that the destabilizing effect of the paradox should be limited to the increase in the frequency and intensity of sub-conventional level violence; a shift to conventional level actions is unlikely to be chosen. Meanwhile, whether a revisionist state intending to exploit the paradox is actually able to increase the intensity or frequency of its aggressive behavior likely depends on the availability of a means that can be exercised without blurring or crossing the qualitative threshold of the conventional level.

These points are also worth noting when considering how to deter revisionists exploiting the paradox. Revisionists' aversion to being drawn into a conflict at the conventional level can be expected to constrain their options when they incur great costs from counterattacks at the sub-conventional level by the status quo side. After all, even in such circumstances, a brinkmanship-like strategy to constrain the other sides' further response by initiating an

escalation to the conventional level, thereby posing the risk of nuclear war that awaits the rivals, cannot be a preferred choice for weaker revisionists.⁷⁶ Hence, having sub-conventional level response options that can impose sufficient costs on the adversary can be a promising solution for status quo powers to deter aggressive actions—and its intensification expected by the paradox—by nuclear-armed revisionists.

That said, a caveat should be added: the success or failure of this deterrent approach must be carefully evaluated. Unlike conventional war, lower-level aggressive actions entail lower costs and hurdles for the perpetrator to overcome. Intuitively, it may be difficult to expect 100% success in deterring their occurrence. Some argue that the effectiveness of deterrence against sub-conventional actions should be measured by a reduction in their intensity or frequency, rather than by whether the actions completely cease to occur.⁷⁷

Conventionally Superior Revisionists and the Paradox

This chapter has thus far examined the function and implications of the stability-instability paradox that works in a manner that benefits conventionally weaker revisionists, which can be expected to be observed widely in the context of contemporary nuclear rivalries. However, although it may be an exception, the need to look at how the paradox works in a situation where the revisionist side has a conventional superiority has been emerging in the past few years. In the contemporary context, the sole case that can fall under this category is the U.S.–China relationship. If China, as a revisionist power, continues to expand its nuclear and conventional forces further, we can expect in future the paradox to work in such a configuration—a conventionally weaker status quo side facing a conventionally superior revisionist.

As we saw in the first section, the logic of the paradox presented by Snyder during the Cold War was that the state of mutual vulnerability works in favor of the conventionally superior revisionist side—the Soviet and the Warsaw Pact in the Cold War context. There was an awareness in the West of the possibility that, as a result of the paradox, the effectiveness of Western nuclear deterrence against conventional aggression would be eroded, leading the East to challenge the status quo with the use of large-scale conventional forces. If similar consequences could be triggered in today's context, it would be of great concern to the status quo side.⁷⁸

That said, some caution is warranted in applying the proposition of the paradox that favors the conventionally superior side beyond the U.S.–Soviet context. Unlike the paradox that favors conventionally weaker revisionists,

the logic of this type of paradox does not suggest that mutual vulnerability at the nuclear-level deterrence relationship generates “destabilizing” effects on the sub-nuclear level. The essence of this paradox, as formularized by Snyder, is to “reinstate the tactical [author's note: sub-nuclear level] balancing process in something approaching its pre-nuclear dimensions.”⁷⁹ That is, under mutual vulnerability, the deterrent effect of both sides' nuclear weapons is strictly lost at the sub-nuclear level, allowing the dynamics of the sub-nuclear level conflict to operate without any influence from the presence of nuclear weapons on both sides.

Therefore, the establishment of mutual vulnerability, which then raises the paradox, in a rivalry involving a conventionally superior revisionist does not always “facilitate” a grave aggression by the superior side at the conventional level; rather, it depends on the situation prior to the attainment of mutual vulnerability. Logically speaking, such actions can be facilitated only when the revisionist side was deterred from taking those actions by the threat of nuclear retaliation by the status quo side prior to the establishment of mutual vulnerability. In this case, the emergence of mutual vulnerability removes the deterrent effect of the status quo side's nuclear weapons at the sub-nuclear level and restores the dynamics inherent in the sub-nuclear level conflict. In other words, the conventionally superior revisionist regains leeway to exercise its conventional advantage. The reason why the establishment of mutual vulnerability was seen by the West during the Cold War as facilitating conventional aggression by the East was simple: before MAD emerged, the West had been able to deter the Warsaw Pact's conventional aggression with the threat of unilateral nuclear retaliation under the Western nuclear monopoly.

It should also be noted that the existence of a conventionally superior revisionist in a nuclear rivalry where mutual vulnerability has been achieved does not necessarily guarantee that the paradox will work as Snyder envisioned, favoring the conventionally superior side. It is debatable whether, in the real world, the state of mutual vulnerability can completely suppress the deterrent effect of nuclear weapons at the sub-nuclear level to the extent suggested by Snyder's argument. After all, the Warsaw Pact eventually did not resort to a major conventional aggression against Western Europe.

In order for the deterrent effect of nuclear weapons to be minimized at the sub-nuclear level, the possibility of nuclear escalation being triggered by war at the sub-nuclear level must be ruled out. Realistically, however, if a large-scale conventional war were to break out between nuclear powers, it would be difficult to assume that there is no possibility of the war somehow going nuclear. Also, the greater the revisionist side's conventional superiority, the greater the likelihood that its challenges leveraging that superiority will

achieve their objectives; however, this also increases the likelihood that the weaker status quo side will resort to nuclear escalation as a rational option to avoid a total defeat in a conventional war. This increased possibility of rational nuclear use in turn restores the effectiveness of the inferior side's nuclear deterrence against conventional aggression, undermining the very basis for the paradox to work in favor of the conventionally superior side. And, above all, a weaker status quo power can take measures to lower the nuclear threshold to enhance deterrence against the superior side's conventional aggression, just as a weaker revisionist exploiting the paradox does to deter a conventional counterattack by the other side.

Of course, even if the use of maximum conventional force were to be constrained under conditions of mutual vulnerability, there could still be leeway for a conventionally superior revisionist to stage various levels and modalities of conventional aggression short of a full-scale conventional onslaught, which could still pose a grave threat from the perspective of the weaker status quo side.⁸⁰ What should be noted here—in particular, by states defending the status quo from the threat of conventionally superior revisionists—is that the revisionist side's perception of the gravity of conventional aggression allowed under the paradox is not a given; rather, the perception can be manipulated by the status quo side to prevent the paradox from fully benefitting the revisionist side.

Conclusion

Starting with a focus on the negative implications of strategic stability, this chapter examined two questions in the context of contemporary nuclear rivalries: (1) how strategic stability based on mutual vulnerability affects the situation at the sub-nuclear level of conflict, and (2) what implications such effects may bring to the stability of the deterrence relationship at the nuclear level. Consequently, this chapter demonstrated that, in today's nuclear rivalries, a state of mutual vulnerability can be expected to give rise to a stability-instability paradox that works to create leeway for a conventionally inferior revisionist state to intensify its challenges to the status quo. It was also pointed out that this phenomenon, in turn, can trigger a vicious action-reaction cycle in which the rivals pursue a variety of limited options both in conventional and nuclear terms, as well as some measures that have direct bearings on strategic stability. With these points in mind, it is difficult to answer Schelling's aforementioned question in the affirmative without caveats—meaning that, in the contemporary context, strategic stability is not an entirely desirable state of affairs in terms of the stability of overall

deterrence relationship between nuclear-armed adversaries.

As noted in the introduction, these arguments, by their nature, remain deductively derived hypotheses; therefore, their applicability to contemporary nuclear rivalries must be empirically tested by follow-up research. Scholars have examined the effects of the stability-instability paradox using quantitative methods in recent years,⁸¹ but there are still few attempts to empirically test not only its effects but also its causal mechanism using qualitative methods. Empirical research of the arguments presented in this chapter can fill this gap.

While this chapter points out the negative implications of strategic stability, this does not mean that the pursuit of strategic stability itself should be abandoned. Reducing the incentive for a preemptive nuclear strike in a crisis is still essential in today's context to prevent nuclear wars, especially the most dangerous strategic nuclear wars. Hence, the insight to be drawn from this chapter's argument—assuming that it is empirically correct—is the necessity to explore conditions under which the stability of the entire spectrum of conflict in a nuclear rivalry can be assured, even if negative implications of strategic stability exist. In this regard, the discussion about the limits of the destabilizing effects of the paradox in the previous section can be valuable.

In a sense, the “second nuclear age” is characterized not only by the multiplicity of nuclear powers and nuclear rivalries, but also by their diversity. This diversity makes it even more important to identify and theorize common patterns that exist among them. Further progress is needed in the effort to theorize the various aspects of nuclear deterrence in the contemporary context.

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12. Michael S. Gerson, "The Origins of Strategic Stability," in *Strategic Stability*, ed. Colby and Gerson, 3.
13. International Security Advisory Board, *Report on the Nature of Multilateral Strategic Stability* (April 27, 2016), 2. It is not uncommon for the term to be used in ways that do not necessarily imply the existence of nuclear weapons. Stratcompa, "How Is Deterrence and Stability Enhanced/Diminished by Arms Control beyond New Start?," YouTube video, 1:39:25, August 25, 2011.
14. Colin S. Gray, "Strategic Stability Reconsidered," *Daedalus* 109, no. 4 (Fall 1980): 135; Douglas Seay, "What Are the Soviets' Objectives in Their Foreign, Military, and Arms Control Policies?," in *Nuclear Arguments: Understanding the Strategic Nuclear Arms and Arms Control Debates*, ed. Lynn Eden and Steven E. Miller (Ithaca: Cornell University Press, 1989), 60-61; Yost, "Strategic Stability in the Cold War," 15. In addition to these two, some have raised political stability as a third subcomponent, referring to "the absence of incentives to take political actions that might lead to crises or nuclear war." Joseph S. Nye Jr., "Nuclear Learning and U.S.-Soviet Security Regimes," *International Organization* 41, no. 3 (Summer 1987): 388.
15. Joseph S. Nye Jr., "Arms Control and International Politics," *Daedalus* 120, no. 1 (1991): 147. The concept of crisis stability was often used interchangeably with strategic stability and nuclear stability. Charles L. Glaser, "Why Do Strategists Disagree about the Requirements of Strategic Nuclear Deterrence?," in *Nuclear Arguments*, ed. Eden and Miller, 156.
16. Elbridge Colby, "Defining Strategic Stability: Reconciling Stability and Deterrence," in *Strategic Stability*, ed. Colby and Gerson, 48.
17. Glenn A. Kent and David E. Thaler, *First-Strike Stability: A Methodology for Evaluating Strategic Forces* (Santa Monica: RAND Corporation, 1989), v.
18. *Ibid.*, xviii.
19. *Ibid.*, xvii. This understanding is largely consistent with the definition that Glaser presented in his 1990 book as the most widely accepted definition of crisis stability: "a measure of the countries' incentives not to preempt in a crisis, that is, not to attack first in order to beat the attack of the enemy." Charles L. Glaser, *Analyzing Strategic Nuclear Policy* (Princeton: Princeton University Press, 1990), 45.
20. The definition used here is based on Colby, "Defining Strategic Stability," 49, which summarizes the discussions held at the time.
21. James M. Acton, "Reclaiming Strategic Stability," in *Strategic Stability*, ed. Colby and Gerson, 121.

22. Thomas C. Schelling, "Surprise Attack and Disarmament," *Bulletin of the Atomic Scientists* 15, no. 10 (1959): 413-414.
23. The following discussion of the conceptual development of strategic stability and mutual vulnerability during the Cold War is based on Gerson, "The Origins of Strategic Stability," 1-37, unless otherwise noted.
24. John A. Battilega, "Soviet Views of Nuclear Warfare: The Post-Cold War Interviews," in *Getting MAD: Nuclear Mutual Assured Destruction, Its Origins and Practice*, ed. Henry D. Sokolski (Carlisle: U.S. Army War College, 2004), 158.
25. Mutual vulnerability and MAD are sometimes used interchangeably, but to be more precise, MAD is a form of mutual vulnerability that involves stricter criteria. The concept of MAD was derived by applying to both sides the criteria used in the U.S. strategy of assured destruction: maintaining sufficient retaliatory forces to destroy 25% of the enemy's population and 50% of its industrial base even after absorbing a first strike from the adversary. This means that, compared to mutual vulnerability, MAD entails a more detailed definition of "catastrophic damage," which is quite high. Mark T. Clark, "Small Nuclear Powers," in *Getting MAD*, ed. Sokolski, 278. Given the scarcity of specific definitions concerning MAD in today's nuclear rivalries, unlike the case of the superpower rivalry, this chapter uses the concept of mutual vulnerability, rather than MAD.
26. Schelling, "Surprise Attack and Disarmament," 414. Scholars are divided as to what is included in crisis stability. While some see it as the suppression of incentives for a preemptive strike solely driven by fear of an adversary's first strike, others regard it as including the prevention of any nuclear first use, regardless of the motive. Acton, "Reclaiming Strategic Stability," 121. However, these differences become less identifiable when mutual vulnerability is positioned as the basis for strategic stability that includes crisis stability as its subcomponent. This is because a state of mutual vulnerability ensures strategic stability by making any deliberate first use of nuclear weapons irrational for both sides, thereby suppressing the fear of a surprise attack and the resulting incentive for hasty preemption. As a result, under a state of mutual vulnerability, the incentive to be the first to use nuclear weapons—or more precisely, strategic nuclear weapons—for any motive is suppressed.
27. Tosaki, "Beiro gunbi kanri," 58.
28. Thomas C. Schelling and Morton H. Halperin, *Strategy and Arms Control* (New York: The Twentieth Century Fund, 1961), 52-54; Yost, "Strategic Stability in the Cold War Era," 17.
29. Stephen Prowse and Albert Wohlstetter, "Stability in a World with More than Two Countries," in *Beyond START?*, ed. Stanford Lakoff (La Jolla: University of California at San Diego, 1988), 46-54. This claim is said to have represented the views of many strategists at the time. Acton, "Reclaiming Strategic Stability," 128.
30. Snyder, "The Balance of Power and the Balance of Terror," 198-199. Snyder did not use the term "stability-instability paradox" in this piece.
31. Ibid., 192-193; Glenn H. Snyder, "Balance of Power in the Missile Age," *Journal of International Affairs* 14, no. 1 (1960): 29. Also refer to Robert Jervis, *The Meaning of the Nuclear Revolution* (Ithaca: Cornell University Press, 1989), 19-20; and Kent and Thaler, *First-Strike Stability*, 5.
32. Snyder, "Balance of Power in the Missile Age," 29.
33. The following descriptions of the damage limitation school, military denial school, and punitive retaliation school are based on Glaser, *Analyzing Strategic Nuclear Policy*, 50-55.
34. Yost, "Strategic Stability in the Cold War," 25.
35. Snyder, "The Balance of Power and the Balance of Terror," 198-199.
36. Snyder considered actions such as interference in the internal politics of Third World countries to fall under the "balance of persuasion," which was a third dimension distinguished from both the "balance of terror" and the "balance of power." Snyder's paradox is a proposition about the relationship between the "balance of terror" and the "balance of power," and thus does not cover these types of actions. Snyder, "Balance of Power in the Missile Age," 33-34.
37. Glaser, *Analyzing Strategic Nuclear Policy*, 110.
38. Yost, "Strategic Stability in the Cold War," 25; Brendan Rittenhouse Green and Austin Long, "The Geopolitical Origins of US Hard-Target-Kill Counterforce Capabilities and MIRVs," in *The Lure & Pitfalls of MIRVs: From the First to the Second Nuclear Age*, ed. Michael Krepon, Travis Wheeler, and Shane Mason (Washington, D.C.: Stimson Center, 2016), 19-53.
39. Battilega, "Soviet Views of Nuclear Warfare," 157-161.
40. Yost, "Strategic Stability in the Cold War," 20.
41. While continuing to pursue a robust nuclear warfighting capability, by the 1970s there was a recognition within the Soviet military leadership that it would be impossible to achieve a meaningful victory in a nuclear war. Battilega, "Soviet Views of Nuclear Warfare," 156-157.
42. Alexey Arbatov and Vladimir Dvorkin, "The Impact of MIRVs and Counterforce Targeting on the US-Soviet Strategic Relationship," in *The Lure & Pitfalls of MIRVs*, ed. Krepon, Wheeler, and Mason, 70-85.
43. Jeffrey Lewis and Aaron Stein, "Who Is Deterring Whom? The Place of Nuclear Weapons in Modern War," *War on the Rocks*, June 16, 2022.
44. For instance, see Sung Chull Kim, "North Korea's Nuclear Doctrine and Revisionist Strategy," in *North Korea and Nuclear Weapons: Entering the New Era of Deterrence*, ed. Sung Chull Kim and Michael D. Cohen (Washington, D.C.: Georgetown University Press, 2017), 39-40; Catlin Talmadge, "The US-China Nuclear Relationship: Why Competition Is Likely to Intensify," Brookings (September 2019), 6-7.
45. Sumit Ganguly, "Indo-Pakistani Nuclear Issues and the Stability/Instability Paradox," *Studies in Conflict and Terrorism* 18, no. 4 (1995): 325-334.
46. David J. Karl, "Lessons for Proliferation Scholarship in South Asia: The Buddha Smiles Again," *Asian Survey* 41, no. 6 (2021): 1002-1022; Jeffrey W. Knopf, "Recasting the Proliferation Optimism-Pessimism Debate," *Security Studies* 12, no. 1 (Autumn 2002): 41-96; Michael Krepon, "The Stability-Instability Paradox, Misperception, and Escalation Control in South Asia," in

- Escalation Control and the Nuclear Option in South Asia*, ed. Michael Krepon, Rodney W. Jones, and Ziad Haider (Washington, D.C.: Stimson Center, 2004), 1-24.
47. For example, P.R. Chari, "Nuclear Restraint, Nuclear Risk Reduction, and the Stability/Instability Paradox in South Asia," in *The Stability/Instability Paradox: Nuclear Weapons and Brinkmanship in South Asia*, ed. Michael Krepon and Chris Gagné (Washington, D.C.: Stimson Center, 2001), 21; Rajesh M. Basrur, "Kargil, Terrorism, and India's Strategic Shift," *India Review* 1, no. 4 (2002): 41; Dinshaw Mistry, "Complexity of Deterrence among New Nuclear States: The India-Pakistan Case," in *Complex Deterrence: Strategy in the Global Age*, ed. T.V. Paul, Patrick M. Morgan, and James J. Wirtz (Chicago: University of Chicago Press, 2009), 187-188.
 48. Austin Long, "Deterrence: The State of the Field," *New York University Journal of International Law and Politics* 47, no. 2 (2015): 366.
 49. S. Paul Kapur, "India and Pakistan's Unstable Peace: Why Nuclear South Asia Is Not Like Cold War Europe," *International Security* 30, no. 2 (Fall 2005): 130.
 50. *Ibid.*, 135.
 51. *Ibid.*, 135-141.
 52. Mario Esteban Carranza, *South Asian Security and International Nuclear Order* (Farnham: Ashgate, 2009), 80; Powell, "Nuclear Brinkmanship, Limited War, and Military Power," 592; Watterson, "Competing Interpretations of the Stability-Instability Paradox," 84-85.
 53. Studies that discuss whether lower level violence in the Indo-Pakistani context can be considered manifestations of the paradox include: Peter R. Lavoy, ed., *Asymmetric Warfare in South Asia: The Causes and Consequences of the Kargil Conflict* (Cambridge: Cambridge University Press, 2009); Kurita Masahiro, *Kaku no risuku to chiiki funso: Indo Pakisutan funso no kiki to ante* [Nuclear risk and regional rivalry: Crises and stability in the India-Pakistan rivalry] (Tokyo: Keiso Shobo, 2018), 55-112.
 54. References to Kapur's discussion in this section are based on S. Paul Kapur, *Dangerous Deterrent: Nuclear Weapons Proliferation and Conflict in South Asia* (Stanford: Stanford University Press, 2007), 32-63 and Kapur, "India and Pakistan's Unstable Peace," 127-152. Bleek, "Conflict in the Shadow of the Bomb," 4-12 was also referred to in examining Kapur's discussion.
 55. Among today's nuclear rivalries, the sole case where there is little indication that the stability-instability paradox is occurring is Sino-Indian relations.
 56. Colby, "Defining Strategic Stability," 53.
 57. The classification of a partner as "marginal" is highly subjective and depends on the perceptions of the parties involved, but it is still an important distinction. Whether or not the status quo side would respond militarily to the adversary's aggressive behaviors even in the face of the risk of nuclear escalation depends on how it perceives the importance of the interests violated by such aggression. If the Russo-Ukrainian War is taken as a case of the paradox, the reason why Russia, which is engaged in outright conventional aggression against Ukraine, cannot do the same against NATO allies may be due to Moscow's understanding that this type of classification exists in Washington's strategic thinking.
 58. Even in situations where this type of paradox can operate, it is debatable whether all violence occurring at the sub-conventional level is a manifestation of the paradox. It is possible, for example, for the revisionist side to commit violence that is too insignificant to motivate the status quo side to retaliate. Such actions are possible with or without nuclear deterrence, having nothing to do with the increased leeway for challenges to the status quo brought about by the paradox.
 59. For example, Colin H. Kahl and Kenneth N. Waltz, "Iran and the Bomb: Would a Nuclear Iran Make the Middle East More Secure," *Foreign Affairs* 91, no. 5 (September-October 2012): 157-161; Takahashi Sugio, "Redefining Strategic Stability: A Japanese View," Carnegie Endowment for International Peace (November 7, 2017); Choi Kang and Kim Gibum, "A Thought on North Korea's Nuclear Doctrine," *Korean Journal of Defense Analysis* 29, no. 4 (December 2017): 505-506.
 60. Christine Leah and Adam B. Lowther, "Conventional Arms and Nuclear Peace," *Strategic Studies Quarterly* 11, no. 1 (Spring 2017): 15.
 61. Signaling the perception that such options can be exercised without triggering nuclear war is an effective means of deterrence. Regardless of whether the status quo side's perception on the possibility of nuclear escalation is correct, when it resorts to conventional retaliation, the revisionist side will be forced to use nuclear weapons. Therefore, if the weaker side is convinced that the superior side's belief in the viability of conventional retaliation is genuine, it will be discouraged from challenging the status quo so as not to provoke a counterattack.
 62. India's "Cold Start" limited conventional war doctrine, which the Indian Army announced in the face of Pakistan's proxy war under the nuclear umbrella, is a typical example of this. Moreover, albeit before the achievement of mutual vulnerability, there were debates in early 2018 on the "Bloody Nose" strategy in Washington, a limited conventional strike against North Korea to demonstrate U.S. resolve. Although this strategy itself was not conceived as a response to North Korea's attempts to alter the status quo, it can also be interpreted as a search for the maximum conventional options against a revisionist that may exploit the paradox.
 63. Snyder, "The Balance of Power and the Balance of Terror," 198-199.
 64. Glaser, *Analyzing Strategic Nuclear Policy*, 75-76.
 65. These classifications are based on the arguments presented by Robert Powell in the late Cold War era. Robert Powell, "The Theoretical Foundations of Strategic Nuclear Deterrence," *Political Science Quarterly* 100, no. 1 (1985): 75-96. That said, while Powell dismisses the significance of limited nuclear use to achieve purely warfighting purposes, the classification of limited nuclear options here includes this type of use, since some countries today are seen as intending to use NSNWs in such ways.
 66. Whether the primary role of limited nuclear use is to inflict punitive "pain" or to achieve warfighting objectives was also a point much debated during the

- Cold War. Lawrence Freedman, *The Evolution of Nuclear Strategy*, Third edition (New York: Palgrave Macmillan, 2003), 92.
67. Even NATO allies in the Cold War era struggled with the question of how to employ tactical nuclear weapons in a militarily effective manner. Jeffrey D. McCausland, “Pakistan’s Tactical Nuclear Weapons: Operational Myths and Realities,” in *Deterrence Instability and Nuclear Weapons in South Asia*, ed. Michael Krepon, Joshua T. White, Julia Thompson, and Shane Mason (Washington, D.C.: Stimson Center, 2015), 154-163.
 68. While France during the Cold War maintained tactical nuclear weapons to deter the Soviet’s conventional aggression, Paris at the time thought a small tactical arsenal was enough to serve this purpose if it would not seek to fight and win a limited nuclear war with these weapons. Avery Goldstein, *Deterrence and Security in the 21st Century: China, Britain, France, and the Enduring Legacy of the Nuclear Revolution* (Stanford: Stanford University Press, 2000), 201.
 69. The logic underlying this approach is Schelling’s “threat that leaves something to chance.” Thomas C. Schelling, *The Strategy of Conflict* (Cambridge: Harvard University Press, 1960), 187-203.
 70. Thomas C. Schelling, *Arms and Influence* (New Haven: Yale University Press, 2008), 227-228. Accident, false alarm, and momentary panic are sometimes cited as factors that could trigger nuclear escalation unwanted by either side. Schelling, however, notes that such factors can lead a state to choose escalation to an all-out nuclear war that it does not want only if it is under pressure to “preempt the other’s preemption.”
 71. That said, these two approaches may somehow coexist in the actual strategies of nuclear powers.
 72. Stulberg and Rubin, “Introduction,” 7.
 73. Christopher Clary, “Survivability in the New Era of Counterforce,” in *The Fragile Balance of Terror: Deterrence in the New Nuclear Age*, ed. Vipin Narang and Scott D. Sagan (Ithaca: Cornell University Press, 2022), 178-179. However, Clary notes that while it is objectively doubtful that the side seeking damage limitation in today’s context can acquire sufficient capability for this purpose, the other side may still be encouraged to take this type of countermeasure.
 74. Schelling, *The Strategy of Conflict*, 53-80; Robert Ayson, *Thomas Schelling and the Nuclear Age: Strategy as Social Science* (London: Frank Cass, 2004), 87-112.
 75. It is only when this condition is met that weaker revisionists can employ conventional military capabilities under the paradox. For example, conventional aggression against a marginal partner of the status quo nuclear power may appear to be a conventional-level action, but it is qualitatively different from direct conventional war between the nuclear adversaries themselves. Even the use of regular military forces between the nuclear rivals themselves may satisfy this condition, if it is strictly localized and/or the parties have established a customary practice to manage such actions without escalation into conventional warfare. For the role of customary practice in establishing a “mutually identifiable resting place,” see Schelling, *The Strategy of Conflict*, 67-68.
 76. The inferior side can be seen as having a structural weakness in carrying out such a brinkmanship strategy. Because of its conventional inferiority, it would be far more likely for the weaker side itself to be forced to make the decision of nuclear first use, which involves the highest psychological hurdle, if a confrontation were to escalate. This contradicts a winning strategy of coercive diplomacy, which requires a state to put the last chance to avoid disaster on the other side’s shoulders. Schelling, *Arms and Influence*, 101-103.
 77. Matus Halas, “NATO’s Sub-conventional Deterrence: The Case of Russian Violations of the Estonian Airspace,” *Contemporary Security Policy* 43, no. 2 (2022): 358.
 78. Studies that express concern about the stability-instability paradox in U.S.–China relations from this perspective include: Catlin Talmadge and Joshua Rovner, “The Meaning of China’s Nuclear Modernization,” *Journal of Strategic Studies* (2023): 15; Jacques deLisle, “U.S.-Japan-Taiwan Dialogue: Deterrence, Defense, and Trilateral Cooperation,” Defense Threat Reduction Agency (October 2022), 13; Michael O’Hanlon, Melanie W. Sisson, and Catlin Talmadge, “Managing the Risks of US-China War: Implementing a Strategy of Integrated Deterrence,” Brookings (September 2022).
 79. Snyder, “Balance of Power in the Missile Age,” 29.
 80. Under these circumstances, a conventionally superior revisionist may choose sub-conventional level actions to challenge the status quo. However, in such a case, unlike when a conventionally inferior revisionist exploits the paradox, the stronger revisionist cannot benefit from the condition that the deterrent effects of nuclear weapons extend to the sub-nuclear level under mutual vulnerability. In the first place, the superior revisionist has little reason to fear a conventional counterattack by the weaker status quo side because of its conventional superiority. Hence, even if the deterrent effect of its nuclear weapons comes to constrain the status quo side’s use of conventional forces, there is unlikely to be any significant change in the likelihood that the weaker status quo side will respond to the stronger side’s sub-conventional aggression with a conventional level counterattack.
 81. For instance, see Bryan R. Early and Victor Asal, “Nuclear Weapons, Existential Threats, and the Stability-Instability Paradox,” *Nonproliferation Review* 25, no. 3-4 (2018): 223-247; Francesco Baido and Benjamin E. Goldsmith, “No Paradox Here? Improving Theory and Testing of the Nuclear Stability-Instability Paradox with Synthetic Counterfactuals,” *Journal of Peace Research* 58, no. 6 (November 2021): 1178-1193; Kyungwon Suh, “Does the Bomb Really Embolden? Revisiting the Statistical Evidence for the Nuclear Emboldenment Thesis,” *Journal of Conflict Resolution* 67, no. 6 (July 2023): 1067-1094.