RESPONDING TO NORTH KOREAN NUCLEAR FIRST USE

So Many Imperatives, So Little Time

National Security Report

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Summary

What if North Korea were to actually use one or more nuclear weapons? How should the United States respond? The singularly important US prewar objective is to deter nuclear war, but once nuclear weapons have been unleashed, this objective will immediately become moot. US post-nuclear-attack imperatives will likely include (1) physically *preventing* further use of nuclear weapons by North Korea; (2) cognitively *dissuading* further North Korean nuclear use; (3) convincing other adversaries that nuclear use is a horrendous idea; (4) allaying allies' concerns about extended deterrence; (5) satisfying domestic political demands; (6) conforming to international law; and (7) last, and quite possibly least, restoring the nuclear taboo. We address each of these imperatives in turn. Our goal is not to determine the "correct" response to North Korean nuclear first use but rather to identify the principal considerations involved in each of these imperatives. Fulfilling all these diverse imperatives in any particular scenario is highly improbable, so we also briefly address the relative priorities among several of them. We conclude with a discussion of the roles of the research and analysis community, the public, and political and military elites who may find themselves in positions of advising the president in a future nuclear crisis.

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The international crisis over North Korea's nuclear arsenal has been a roller-coaster ride with highs and lows punctuated by periods of relative calm. The crisis most recently peaked during the first eighteen months of the Trump administration, with a classic demonstration of nuclear brinkmanship conducted through a war of words that included, *inter alia*, the following exchange:[1]

> The United States has great strength and patience, but if it is forced to defend itself or its allies, we will have no choice but to totally destroy North Korea. Rocket Man is on a suicide mission for himself and for his regime.
>
> —*President Donald J. Trump, September 19, 2017*

> I will surely and definitely tame the mentally deranged US dotard with fire.
>
> —*Chairman Kim Jong Un, September 21, 2017*

Several months later, these implicit nuclear threats were made more explicit:[2]

> A nuclear button is always on the desk of my office.
>
> —*Chairman Kim Jong Un, January 1, 2018*

> Will someone from his depleted and food starved regime please inform him that I too have a Nuclear Button, but it is a much bigger & more powerful one than his, and my Button works!
>
> —*President Donald J. Trump, January 2, 2018*

This worrisome duel of threats and insults rather abruptly gave way to a series of summits (three, including a brief meeting in the demilitarized zone, as of this writing) between Trump and Kim, starting in June 2018, and a marked turnabout in rhetoric. Trump, in particular, expressed his admiration for the North Korean dictator after the first summit in Singapore, famously declaring that they "fell in love."[3]

Notwithstanding these developments, it is becoming increasingly apparent that the US goal of North Korean denuclearization is highly unlikely to be achieved in the foreseeable future, if ever. Short-range missile testing has already resumed; submarine-launched ballistic missile testing is ongoing; nuclear weapon and long-range missile development and/or production may also be ongoing; and either or both nuclear weapons and long-range missile testing could resume at any time. Most recently, North Korean officials have expressed frustration with the progress of negotiations, blaming US hostility. In late October 2019, Kim Youn Chol, a high-ranking North Korean diplomat, assessed the status of the negotiations as follows: "No substantial progress has been made in the DPRK-US relations and the belligerent relations still persists that there can be the exchange of fire any moment."[4] However this international drama unfolds in the future, it is apparent that the currently simmering crisis regarding North Korea's growing nuclear arsenal could erupt at any moment.

While official US policy continues to emphasize achieving complete, verifiable, and irreversible denuclearization, a de facto policy shift is underway that acknowledges we must plan on living with a nuclear North Korea indefinitely. To that end, attention has been more recently focused on how to enforce deterrence—i.e., dissuade any North Korean use of nuclear weapons. But, despite our best efforts, deterrence may remain fragile. So, we must ask questions that have received relatively little serious scholarly or policy consideration: *What if North Korea were to actually use one or more nuclear weapons? How should the United States respond?*

[1] See Trump, "Remarks." Kim's rejoinder, as reported by the Korean Central News Agency, can be found in Fifield, "Kim Jong Un Calls Trump a 'Mentally Deranged U.S. Dotard.'"

[2] Jeong, "Kim Jong Un Says"; and Trump (@realDonaldTrump), "North Korean Leader."

[3] Rampton, "'We Fell in Love.'"

[4] "KAPPC Chairman's Statement."

Post-Nuclear-Attack Imperatives

The singularly important US prewar objective is to deter nuclear war, but once nuclear weapons have been unleashed, this objective will immediately become moot. New US post-nuclear-attack imperatives will likely include (1) physically *preventing* further use of nuclear weapons by North Korea; (2) cognitively *dissuading* further North Korean nuclear use; (3) convincing other adversaries that nuclear use is a horrendous idea; (4) allaying allies' concerns about extended deterrence; (5) satisfying domestic political demands; (6) conforming to international law; and (7) last, and quite possibly least, restoring the nuclear taboo.

We address each of these imperatives in turn. Our goal is not to determine the "correct" response to North Korean nuclear first use but rather to identify the principal considerations involved in each of these imperatives. Fulfilling all these diverse imperatives in any particular scenario is highly improbable, so we also briefly address the relative priorities among several of them. We conclude with a discussion of the roles of the research and analysis community, the public, and political and military elites who may find themselves in positions of advising the president in a future nuclear crisis.

1. Preventing Further Use of Nuclear Weapons by North Korea

Perhaps the most important consideration in determining how to respond to North Korean nuclear first use is the extent to which a retaliatory counterforce attack (i.e., directed against military targets, especially those enabling further attacks), whether conventional or nuclear, would prevent further nuclear use. For at least two reasons, it is very likely North Korea will keep nuclear weapons in reserve. First, it currently has up to several tens[5] of operational nuclear weapons that could within a decade grow to number in the hundreds. Unleashing this entire arsenal in a first strike would cause immense damage, thereby running the tremendous risk of a nation-ending response.

Second, North Korea needs to keep weapons in reserve to maintain the threat of a nuclear response to any US retaliation against its first nuclear use. If some or all of this reserve is survivable, the United States could, perhaps, at least be deterred from an unconstrained nuclear retaliation, lest it provoke an unconstrained second nuclear use by North Korea. Alternatively, if the North Korean nuclear weapons reserve is not survivable, it could invite a US counterforce retaliation. However, if North Korean nonsurvivable nuclear weapons are on "hair-trigger" alert, such a retaliation could similarly result in further use by North Korea unless the US retaliation were carefully orchestrated to tactically surprise North Korea.

An imperfect analogy is provided by one presidential decision amid the Cuban missile crisis. President John F. Kennedy considered air strikes against Soviet missile bases in Cuba but decided against them when he was advised there was no guarantee of 100 percent effectiveness, meaning that the United States might find itself on the receiving end of one or more surviving nuclear missiles launched from Cuba. The analogy is imperfect in that Kennedy's decision was whether to initiate a first strike, not a retaliation, and the option under consideration involved using conventional, not nuclear, weapons. Nevertheless, one might infer from this historical example that any US president could similarly require 100 percent effectiveness to conduct a counterforce attack against remaining North Korean nuclear weapons. Yet it is also clear that this inference, while not implausible, is not certain to pertain to the current and all future US presidents and all conceivable future nuclear crises.

[5] Kristensen and Norris, "North Korean Nuclear Capabilities, 2018."

To summarize, while the dominant imperative might be to prevent further North Korean nuclear use, accomplishing this goal with high confidence is almost certainly beyond US capabilities, and the challenge will only get more intractable as the North Korean nuclear arsenal grows in size and survivability.

2. Dissuading Further North Korean Nuclear Use

It is not irrational to argue that any US objective in retaliating after North Korean nuclear use would not be worth the destruction of an(other) American city, let alone the damage that would result from a large nuclear strike against the US homeland. Thus, one possibility, seldom discussed, for protecting the United States from further North Korean nuclear use is simply to capitulate to North Korean demands in the conflict. Under this strategy, the United States would neither respond with nuclear weapons nor prosecute a conventional conflict or threaten North Korean regime survival. It might even withdraw military forces from the Korean peninsula entirely. Of course, Japan thought—or hoped—the United States would similarly react by withdrawing from the western Pacific as a result of its attack on Pearl Harbor. But there are also historical analogies (e.g., the Soviet Union in Afghanistan and the United States in Vietnam) of a state withdrawing from a conflict that support the possibility of a US disengagement from the Korean peninsula.

If the United States cannot prevent further North Korean nuclear use by destroying its residual nuclear force and is unwilling to capitulate, it still might be able to *dissuade* further North Korean nuclear use, and this goal would probably rise to the top of the priority list. Assuming at least a partially survivable residual North Korean nuclear arsenal, dissuading further North Korean nuclear use would require a less-than-completely-devastating US retaliation so that North Korea would still have something left to lose as it contemplates the costs and benefits of a second nuclear strike.

Thus, in contrast to obliterating North Korea, the United States must consider attacks with more limited objectives. For example, attacking North Korean leadership, including Kim Jong Un personally, might be considered because of their presumed personal role in having authorized the nuclear first use and similarly presumed role in authorizing further use. On the other hand, at the apex of decision-making, the North Korean leader could also be essential in authorizing a cessation of nuclear attacks, so such a targeting strategy, if successful, could prove counterproductive. And if unsuccessful, an attack on the North Korean leader could lead him to fire off all his remaining nuclear weapons before another attempt on his life is made. Finally, he could have a "dead hand" system in place that would automatically launch North Korea's arsenal should he die in a US attack.

Another alternative is to conduct a counterforce attack on nuclear capabilities with the full realization that it will be less than fully successful. In addition to deployed nuclear weapon systems, this attack could include targets associated with fissile material production; delivery system production; nuclear weapon storage; and research, development, and testing facilities. Such an attack would be less escalatory than one that included countervalue targets (i.e., directed against nonmilitary, such as economic, targets) and would at least reduce the residual North Korean nuclear threat.

If the North Korean first nuclear use included targeting a population center, the United States might be tempted to retaliate against the North Korean capital or another population center. Such a response would be problematic for many reasons, most notably the potential for a subsequent sequence of tit-for-tat countervalue attacks against more and more population centers that would impose far more damage to the United States and/or its allies, compared with their abilities to tolerate

such damage, than to North Korea. As discussed below, such retaliation would additionally violate international law and could undermine extended deterrence; however, it might be considered to satisfy public and even political and military elites' demands for vengeance.

Perhaps the retaliatory targeting option that makes the most sense is one that is unlikely to restore nuclear deterrence. This option would focus retaliation on military impact. In particular, if the conflict in which nuclear use occurred involved a conventional war on the Korean peninsula, this could involve targeting military bases, troop concentrations, air defenses, supply depots, transportation nodes, and similar capabilities that support conventional warfare. Unfortunately, to the extent that this targeting approach is successful, it runs the risk of provoking further North Korean nuclear use to avoid defeat in the ongoing war or bring the United States to the negotiating table.

While none of these options are satisfactory, some are worse than others with respect to dissuading further North Korean nuclear use. Ironically, the option least likely to be successful—targeting nuclear capabilities—may be the least unattractive choice.

3. Convincing Other Adversaries That Nuclear Use Is a Horrendous Idea

With North Korean nuclear first use, deterrence will have failed and its future viability as the cornerstone of US national security strategy will be in doubt. Thus, beyond dissuading North Korea from further nuclear use is the imperative of shoring up deterrence of other adversaries who might consider nuclear use in the future and will draw lessons from the episode of North Korean first use and US response. The lesson the United States will want to impart to such adversaries is that any nuclear use is a horrendous idea.

We can envision a number of outcomes that might achieve this. One is North Korea as a functioning state being destroyed. A less extreme outcome—the Kim regime being overthrown—might also be effective. Perhaps the least extreme outcome that could suffice is the nuclear first use being perceived as both militarily and politically ineffective.

But it is also entirely possible that some future adversaries would view the damage caused to the United States and/or its allies by North Korea's nuclear first use as a success, regardless of whether their country or regime survived the US response. Consider once again the Cuban missile crisis, in which Fidel Castro urged Soviet Premier Nikita Khrushchev to launch a preemptive nuclear attack on the United States if it invaded Cuba, fully expecting that the inevitable US retaliation would destroy Cuba and his regime: "We knew, and do not presume that we ignored it, that we would have been annihilated . . . in the event of nuclear war."[6]

A second lesson that the United States might wish to impart to other potential adversaries is that proliferation of nuclear weapons is a path to disaster, tracing North Korea's demise to the nuclear weapons development program that enabled it to use nuclear weapons. Beyond this, it is not inconceivable that the United States would deem intolerable the existence of nascent nuclear weapons programs in other states (Iran comes to mind) and attempt to compel cessation of these programs or nuclear disarmament under threat, or employment, of military force.

4. Satisfying Allies' Concerns about Extended Deterrence

Central deterrence is intended to dissuade potential adversaries from attacking the United States, its territories, or its interests. Extended deterrence

[6] Castro, letter to Khrushchev, October 31, 1962. See also Castro, letter to Khrushchev, October 26, 1962; and Khrushchev, letter to Castro, October 28, 1962.

is intended to do the same for our allies. The United States benefits from extended deterrence by discouraging our allies from developing their own nuclear arsenals to accomplish this same purpose. Our allies benefit for the same reason and because the US deterrent is far more capable than anything our allies could feasibly muster.

However, compared with central deterrence, there is a fundamental concern about the credibility of extended deterrence. Some allies are perpetually and rightfully apprehensive that in the event of a nuclear attack on them that does not also include targeting of the United States, the United States might not follow through on its extended deterrent commitment because retaliation from the United States would then make it a nuclear combatant in a war that could engulf the nation. Neither the United States nor any of its allies want to be the battlefield on which nuclear war is fought.

Thus, if the North Korean nuclear first use is against South Korea, Japan, or even Guam or the US Pacific fleet—i.e., not against the US homeland—the United States could hesitate to respond with nuclear weapons in a manner that might provoke an escalation to attacks against US homeland targets. This suggests that (1) North Korean nuclear first-use scenarios could well not involve attacks against the United States homeland; and (2) if our allies judge that the United States has not responded adequately, they could be motivated to develop their own nuclear arsenals in the future. However, we are not altogether convinced that South Korean or Japanese nuclear weapons would be a devastating blow to either the US nonproliferation agenda or nuclear stability in Northeast Asia.

5. Satisfying Domestic Political Demands

It is likely that the context and circumstances leading to a response to North Korean nuclear first use will have a major impact on the public's resistance to, tolerance for, or demand for nuclear retaliation. For instance, there may be public support if the objective is to take out the North Korean leader in retaliation for a nuclear strike on US soil. Of course, this assessment may be different if the North Korean first use is on foreign soil.

We do not pretend to have a good grasp on the likely public reaction to North Korean nuclear first use, which, depending on the context, could range from bloodlust to cut and run. Undoubtedly, some segment of the population will clamor for the nuclear obliteration of North Korea in the immediate aftermath of any nuclear first use, while others may be busy panicking about a possible second strike. The one observation we venture to make is that historical evidence suggests that the US populace is not overly concerned with foreign deaths in war when domestic security is at risk.

Because the situation of responding to first nuclear use would be unprecedented, even the president may lack a solid grasp on domestic political expectations. The president's decision will be revisited in time, and the president may realize that the public may come to a different view in the years and decades following the attack. Similarly, the president will likely understand that historians will make their judgments, which also undoubtedly will not coalesce into a consensus view and could change over the span of centuries. Thus, while it would be understandable for the president to consider, among the other variables, not just public expectation but also his/her legacy, the effect of such considerations is largely unpredictable.

We extend this discussion of the public's influence on presidential decision-making in the following section.

6. Conforming to International Law

It has been argued that nuclear weapons are by their very nature incapable of being used in compliance with several key principles of international

humanitarian law (IHL)—namely, distinction, military necessity, and proportionality.[7] These principles apply to nuclear weapons as they do to any other weapon, and they also apply to retaliation as well as first use. Their general purpose is to act as a restraint on states' use of force, particularly with regard to the protection of civilian populations.

Portions of international law, including these principles, are considered customary, meaning states are bound to abide by them whether or not they have signed the relevant treaty or convention. As a rule, state obligations to both civilians and combatants under IHL are applicable from the start of an armed conflict throughout its duration. There can be a legitimate debate over whether the United States should consider itself in an armed conflict in various circumstances. However, notwithstanding nuanced legalisms that may argue to the contrary, it seems reasonable to assume that after the launch of a nuclear weapon by North Korea, the United States would consider itself in an armed conflict with North Korea. Moreover, it is quite likely the United States would be guided by these principles regardless of whether it is engaged in a recognized armed conflict. Therefore, an analysis of IHL is appropriate.[8]

The principle of distinction requires that parties to a conflict distinguish between combatants and civilians, with attacks targeting combatants only. While certain circumstances may justify limited civilian casualties (collateral damage), the potential harm to civilians must be minimized or, if possible, removed altogether. In the context of nuclear weapons, this is perhaps the most difficult principle to comply with, as the magnitude of a nuclear blast and the vast amount of resultant damage will almost certainly include civilian casualties. Nonetheless, civilian casualties may not be a foregone conclusion in every case. Whether civilians are injured or killed depends on the location of the target, the weapon's yield and height of burst, and where the weapon detonates, among other factors. Immediate death is not the only measure for distinction, but illness, delayed injuries, and decreased life span that result from civilian proximity to the detonation(s) are also concerns that could make compliance difficult and perhaps impossible in some cases.

The principle of military necessity is a constraint limiting states only to actions that further a legitimate military objective. Interpretations of IHL have done little to expand on this somewhat hollow definition. The prevailing interpretation is that the only legitimate military objective is to weaken the adversary's capacity to fight.[9] Under such a broad objective, it may seem that many actions can be deemed lawful. However, with the potential for catastrophic damage, nuclear use may be difficult to justify. Nonetheless, we can imagine legitimate military objectives for which conventional weapons are largely ineffective, such as neutralizing military targets with location uncertainty, hardened or deeply buried targets, and area targets.

The principles of distinction and necessity are linked through the principle of proportionality. Proportionality is the requirement on states to assess the expected collateral harm of an attack on civilians and/or civilian assets measured against the expected concrete and direct military advantage. This can be a troublesome concept to apply in practice because of the inherent difficulty of reconciling a mission's military advantage with civilian deaths. With nuclear weapons, the quandary of evaluating a legitimate military objective (e.g., eliminating

[7] For a discussion of these and related principles, see Sassòli et al., *How Does Law Protect in War?*

[8] Some states believe international human rights law (IHRL) applies in addition to IHL; however, this is not the US view. Applying IHRL to armed conflict introduces a host of complications. For example, proportionality under IHRL requires a state to use the least amount of force necessary to stop the threat, whereas under IHL, the proportionality assessment is made in relationship to the harm to civilians.

[9] International Committee of the Red Cross (ICRC) interpretation of the principle of necessity; see Sassòli et al., *How Does Law Protect in War?*

North Korean missile launch capability) and the potential collateral damage (e.g., loss of tens of thousands of lives) is evident. If launch platforms and warheads are not located in close proximity to population centers, it is possible that most casualties would be military personnel and therefore legitimate targets. To the extent they are not military personnel, it is possible the objective is of such critical importance that the resulting collateral damage would be acceptable under IHL.

The question of whether the United States could lawfully respond in kind to North Korean first nuclear use must also be evaluated under the concept of belligerent reprisal (hereinafter "reprisal"). As defined under IHL, the term refers to "an act that would normally be unlawful under IHL, but which is not prohibited insofar as it seeks, within tightly defined circumstances and criteria, to bring another party to the conflict back into compliance" with the law.[10] The exact requirements for evaluating reprisal are not defined in the 1949 Geneva Conventions or the 1977 Additional Protocols. However, through various states' doctrines[11] and interpretations of the law, there is general agreement on the following six criteria:

(1) **A reprisal must be a response to a prior unlawful act.** The purpose of a reprisal is to bring an adversary back into compliance with the law, after commission of an unlawful act. Thus, there is no such thing as a preemptive reprisal or a reprisal to a lawful act.[12]

(2) **It must be in response to a serious violation of IHL.** The subjectivity of a "serious" violation makes evaluation of this criterion difficult, but states have generally agreed that violations must be widespread or, if an isolated incident, it must have resulted in a particularly grave violation of the law.[13]

(3) **Recourse to reprisal must be necessary to reestablishing compliance.** Unless "clearly doomed to be ineffective," all other measures, including lawful actions and diplomatic measures, should be taken first.[14] The offending state must be given notice and be warned of the consequences of not becoming compliant with IHL, and the decision to pursue reprisal must come from the highest political level of a state. Note that while preemptive reprisals are not allowed, this requirement does seem to allow for the threat of lawful reprisals as a way to prevent further unlawful acts. [15]

(4) **Reprisal is undertaken with the intent to restore compliance with IHL.** The important point here is that acts undertaken with the intent to punish are not reprisals. Reprisal is an act of extreme coercion with the sole intent of ensuring a return to compliance with IHL.

(5) **The act of reprisal must be proportionate to the original breach.** This criterion requires that the act of reprisal not exceed the level

[10] Casey-Maslen, "Use of Nuclear Weapons as a Reprisal," 173.

[11] For an individual country interpretation, see ICRC, IHL Database, section 145, Reprisals.

[12] Casey-Maslen, "Use of Nuclear Weapons as a Reprisal," 176. On this point, The US *Commander's Handbook on the Law of Naval Operations*, like the doctrine of several other countries, only offers that a reprisal "must respond to illegal acts of warfare committed by an adversary government, its military commanders, or combatants for which the adversary is responsible. Anticipatory reprisal is not authorized." See US Department of the Navy et al., *Commander's Handbook*.

[13] Casey-Maslen, "Use of Nuclear Weapons as a Reprisal," 176.

[14] Casey-Maslen, "Use of Nuclear Weapons as a Reprisal," 176–177.

[15] The threat of a nuclear reprisal was specifically addressed in judge Stephen M. Schwebel's dissenting judgment in the Nuclear Weapons Advisory Opinion. He referred to US secretary of state James Baker's implicit threat to use nuclear weapons against Iraq in response to chemical or biological weapon use against military forces, which many believe successfully deterred Saddam Hussein. On this point Judge Schwebel asks whether it can "be seriously maintained that Mr. Baker's calculated threat was unlawful." See International Court of Justice, "Legality of the Threat or Use of Nuclear Weapons," 327–328.

necessary to bring the offending state into compliance and that it be proportionate but not necessarily the same in kind as the original breach. The US Army manual *The Law of Land Warfare* states that acts "should not be excessive or exceed the degree of violence committed by the enemy."[16]

(6) **Reprisals must not be taken against prohibited targets.** This includes the wounded and sick, prisoners of war, and civilians and civilian objects. It is worth noting that during the negotiation of Additional Protocol I of the Geneva Conventions, the United States objected to the comprehensive prohibition on reprisals against civilians. Specifically, the United States felt this provision removed a significant deterrent in war and wanted the ability to threaten or attack the enemy's civilian population if the enemy's unlawful act had targeted the US civilian population. The United States maintains this position.[17]

Based on these six principles, it is apparent that there is only a narrow window for when reprisal offers a lawful option for retaliation with nuclear weapons that is not otherwise available under international law. The United States would be justified in resorting to reprisal only if North Korea's actions were serious and unlawful violations of IHL. Since the response needs to be in relative alignment with the damage suffered, if the United States is resorting to a nuclear response it likely needs to be in reaction to a significant loss of civilian life. One example occurs when the United States and North Korea are in an ongoing war and conventional attacks are levied in compliance with IHL. If in the course of the conflict North Korea escalates to the use of nuclear weapons to mount a disproportionate attack on a military installation resulting in excessive collateral loss of civilian life due to proximity to a population center, this could constitute an unlawful act. Arguably, the United States could use reprisal to respond in kind, which may otherwise be an illegal retaliation, in order to bring North Korea into compliance.

It is apparent that IHL as applied to nuclear weapons is a complicated and debated area of scholarship. However, legal justification is only one area of concern. The fidelity with which the United States and other nations apply the principles of IHL is likely not motivated by fear of war crimes charges, as enforcement is inconsistent and often without tangible consequence, and higher priorities may render consideration of international law moot. Further, it is not clear that the president will even seek advice on IHL. And even if the president does, it is not clear that his/her advisors will include individuals who are trained and capable of thinking through these issues under the strain of an unfolding conflict. For the many worthy constraints IHL imposes, compliance may be a second- or third-order consideration, if it arises at all.

7. Restoring the Nuclear Taboo[18]

The conviction that nuclear weapons are weapons of last resort has been widely held since Japan's surrender in the Pacific War. This attitude arose initially from moral revulsion at the horrific consequences of the atomic bombings of Japan and then, after the Soviet Union also acquired nuclear weapons, the cold calculus of deterrence. These related factors have worked in tandem to establish a *tradition* of nonuse of nuclear weapons that has endured since 1945 and to foster the emergence of the global norm that many refer to as the *nuclear taboo*. The nuclear taboo is the conviction that nuclear use—or, at least, nuclear first use—should not occur under *any* circumstances.

[16] US Department of the Army, *Law of Land Warfare*, ¶497(e), 177.

[17] US Department of Defense, *Law of War Manual*, 1115.

[18] This discussion is informed by a workshop recently conducted by the authors (Hahn et al., *Responding to North Korean Nuclear First Use*).

Although its emergence was opposed by some US political and military leaders during the Truman and Eisenhower administrations, the nuclear taboo has been increasingly accepted as having a crucial role in preventing the use of nuclear weapons throughout the remainder of the Cold War and thereafter. However, the mechanisms through which this norm has operated, especially during periodic nuclear crises, are not well understood. George Quester's *Nuclear First Strike: Consequences of a Broken Taboo*, Nina Tannenwald's exposition *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945*, and T. V. Paul's *The Tradition of Non-Use of Nuclear Weapons* are notable exceptions to the dearth of research on this topic. More recently, Frank Sauer, in his book *Atomic Anxiety: Deterrence, Taboo and the Non-Use of U.S. Nuclear Weapons*, examines the relationship between nuclear deterrence and the nuclear taboo.[19]

Our limited understanding of the nuclear taboo means we cannot be confident that this norm, despite its criticality, is robust, and there are significant indications that it may be increasingly fragile as we approach the fourth post–Cold War decade.[20] In his Nobel Prize lecture, Thomas Schelling argues that the norm is precious and calls for further study to understand and preserve it:

> This attitude, or convention, or tradition, that took root and grew over these past five decades, is an asset to be treasured. It is not guaranteed to survive, and some possessors or potential possessors of nuclear weapons may not share the convention. How to preserve this inhibition, what kinds of policies or activities may threaten it, how the inhibition may be broken or dissolved . . . and whether we should assess it as robust or vulnerable in the coming decades, is worth examining.[21]

Schelling calls for a broad research agenda. By contrast, to the extent research has been done, it has focused on maintaining the tradition of nonuse of nuclear weapons through maintaining the efficacy of deterrence, reducing the salience of nuclear weapons, and limiting proliferation.

These strategies also support the nuclear taboo because the greatest challenge to it will occur when nuclear weapons are used again. There is a presumption that once violated, the norm against the use of nuclear weapons cannot endure. But, this presumption is not based on a body of research; it is possible that the response to first use could act to reaffirm the relevance of the norm and that a single violation would not necessarily irreversibly undermine the norm's existence.[22]

Limited research has sought to analyze the mechanisms through which violations contribute to norm erosion. Of the studies conducted, many have focused on case-specific explanations for norm erosion rather than the development of general principles. However, the research suggests that whether a norm survives or deteriorates depends on developments (social and political) that happen after the norm has been internalized, which may lead to a competing norm or the evolution of the existing one.[23] This body of research can inform the identification of variables that may impact the nuclear taboo specifically, but determining how to counter norm erosion is largely uncharted territory.

Despite the lack of scholarly research focused on how to mitigate harm to the norm and how to restore it after nuclear first use, the question of response to nuclear first use is a common subject of

[19] Quester, *Nuclear First Strike*; Tannenwald, *Nuclear Taboo*; Paul, *Tradition of Non-Use*; and Sauer, *Atomic Anxiety*.

[20] Tannenwald, "Vanishing Nuclear Taboo?"

[21] Schelling, "An Astonishing Sixty Years."

[22] Deitelhoff and Zimmerman, "Norms under Challenge."

[23] Müller and Wunderlich, *Norm Dynamic*, 27. See also Koschut, *Normative Change*, 18.

tabletop exercises. Often, exercise participants find themselves divided into two intellectual camps. In one camp are those who believe every attempt should be made to develop a nonnuclear response to limited first nuclear use because such a response would be consistent with the norm against nuclear use and thereby serve to reinforce it, or at least not further undermine it. The simple logic here is that the preservation of a norm cannot be aided by its violation. We are not convinced by this argument. It seems at least as plausible that occasional violation of any norm, which will remind the world of the reasons for its existence, may be necessary to ensure its continuing viability over the long term. Moreover, since the nuclear first use violated the norm, it is not clear what additional damage a nuclear retaliation would cause.

In any event, the other intellectual camp focuses on reestablishing deterrence, implicitly taken to be a higher priority than restoring the nuclear taboo. Thus, the argument goes, a nuclear response would be both warranted and beneficial—perhaps even necessary—to reestablish deterrence *even if an effective conventional response could be developed*. Nuclear, rather than conventional, retaliation should also magnify the horror that underlies the nuclear taboo.

Neither side of this debate is on especially firm intellectual ground. The camps often talk past each other—one focused on the taboo and the other on deterrence. And the points at issue are addressed primarily through speculative argumentation. The result is confusion and the inability to change minds. Particularly lacking is a convincing case that conventional response to nuclear use would be helpful to restoring the nuclear taboo. What is clearer, by contrast, is that such a response would pose significant challenges to restoring deterrence.

Finally, we observe that when a nuclear weapon is used, there will be very little time to think through response decisions. Considerations of reestablishing the norm against nuclear use will likely fall by the wayside because of the imperatives of other US objectives, such as limiting escalation, neutralizing the threat, and carrying out retributive justice. If we do not think carefully about how our response might impact the norm before the norm is violated, we will likely not give the topic its just due.

Roles of Various Communities

We conclude with comments on the roles of various communities in developing policies to guide response to nuclear first use.

Research and Analysis Community

Ever since acquiescence to the doctrine of mutual assured destruction, research and analysis has focused on deterrence, but it is becoming increasingly clear that we must not ignore the possibility of its failure. We need to pay more analytic attention to deterrence failure and to the myriad considerations influencing our response to such failure.

There is no shortage of important research questions, examples of which include:

- Which nuclear first-use scenarios are probable enough, or challenging enough, or consequential enough to merit detailed Department of Defense planning?
- Under what circumstances would nuclear first use undermine (or irrevocably break) the nuclear taboo and how?
- Which characteristics of first-use scenarios are important in deciding among second-use options?
- How can we ensure that presidential decision-making regarding response to nuclear first use is fully informed?
- What are the assumptions and logically developed arguments that support and refute the

claims that (1) a nuclear response is necessary to restore nuclear deterrence and (2) a nonnuclear response will help restore the nuclear taboo?

- How might we try to control escalation of nuclear war? How might nuclear war end?
- How would the development of new conventional, asymmetric, and/or nuclear capabilities affect decision-making regarding retaliation to nuclear first use?
- Would nuclear first use encourage or inhibit nuclear proliferation? How might the nature of any retaliation affect proliferation?

Public

As long as nuclear weapons exist it is possible they will be used. This possibility presents one of the most troubling issues of our time, and considerations about under what circumstances and how they may be used have obvious critical implications for society. But the public's clear stake in nuclear decisions does not immediately translate into a direct role in decision-making. For one thing, ubiquitous social media notwithstanding, there are no mechanisms to accurately convey public perspectives in a rapidly evolving crisis, much less in the aftermath of a nuclear strike. But more fundamentally, the public is generally ignorant about nuclear issues. We agree with the wisdom of Nikita Khrushchev, who decided to remove Soviet nuclear missiles from Cuba, in his response to Fidel Castro's prior entreaty to undertake a nuclear strike on the United States should it attack Cuba:[24]

> As we learned from our ambassador, some Cubans have the opinion that the Cuban people want a declaration of another nature rather than the declaration of the withdrawal of the missiles. It's possible that this kind of feeling exists among the people. But we, political and government figures, are leaders of a people who doesn't know everything and can't readily comprehend all that we leaders must deal with. Therefore, we should march at the head of the people and then the people will follow us and respect us.

Yet, while public opinion might not, and perhaps should not, be influential in the throes of a nuclear crisis, it is immensely important in shaping policy over the long term. The criticality of the role of the public can be seen in the fact that the emergence and endurance of the nuclear taboo was driven by public attitudes, specifically as a consequence of the atomic bombings of Hiroshima and Nagasaki as well as radiation contamination from nuclear weapons tests. This norm of nonuse grew out of public reaction, rather than from the strategic thought of political and military elites, many of whom sought to prevent the development of the norm. As Tannenwald observes, "domestic public opinion was an important factor both in constraining US leaders' resort to the use of nuclear weapons and in forming the taboo itself."[25]

Just as the public influenced the development of the nuclear taboo, so too does the public have a critical role to play, and should be engaged, when the norm remains threatened well after the nuclear conflict has ended. Restoration of the norm will be extremely difficult absent public support.

Military and Political Elites

Perhaps the most important reason we averted World War III during the Cuban missile crisis is that President Kennedy ignored the advice of both his military and civilian advisors, who uniformly called for attacking missile bases in Cuba. Unfortunately, we cannot count on Kennedy's wisdom and backbone in future presidents.

[24] Khrushchev, letter to Castro, October 30, 1962.

[25] Tannenwald, *Nuclear Taboo*.

Presidential appointees might be in positions to provide sound advice to the president. Under the Constitution, it is up to the president to nominate and the Senate to confirm individuals to cabinet and other high-level positions. Unfortunately, even when highly competent individuals are appointed to critical positions, there is no guarantee they will have knowledge or experience with nuclear issues.

Compounding this problem, nuclear expertise in Congress is harder to find than during the Cold War, as observed, for example, by the former director of nuclear challenges at the MacArthur Foundation: "With a few crucial exceptions, interest in and knowledge about nuclear issues in Congress has waned significantly over the last few decades."[26] Stated even more pointedly:

> Most members of Congress don't have any knowledge about our nuclear weapons programs, nor any interest in nuclear weapons. When they need to vote on a budget proposal, a program, a policy on nuclear weapons, they follow the lead of the few members of Congress who have the knowledge and who they already trust. . . . The vast majority [of members] don't know, don't care, don't have the time. . . . If you have the sense that the number of people that know these things and are interested in these things has been declining over the years, that's true.[27]

Because of this, as well as a potentially fast-paced crisis tempo, Congress as a whole and individual senators and representatives may not be in a position to advise the president.

We offer no comprehensive solution to this problem. But part of any solution surely lies in determining how the nuclear planning expertise that does exist within the US government (e.g., in the Office of the Under Secretary of Defense for Policy, the United States Strategic Command, the intelligence community, the Department of Energy, and the Defense Threat Reduction Agency) can best be leveraged.

Final Thoughts

We do not intend in this paper to convey undue alarm over the imminence of nuclear war, in North Korea or elsewhere. We think deterrence is probably reasonably robust, in no small part because of overwhelming US nuclear dominance and because Kim has demonstrated rationality in his actions regarding his nuclear weapon programs. However, the qualifiers *probably* and *reasonably* are not completely assuring. Nuclear war can erupt because of miscommunication, misperceptions, miscalculation, desperation, accident, and a host of other foreseeable and unforeseeable events. Because of the cataclysmic consequences of even so-called limited nuclear wars, and the attendant risk that any such wars could escalate to global Armageddon, we must include scenarios of deterrence failure in our analyses, planning, and policy formulation. It is not inevitable that all hope will be lost if nuclear weapons are used once again in war. Our judicious response, based on a solid intellectual foundation, could be crucial in limiting the extent of any such war and restoring both deterrence and the nuclear taboo.

[26] Belcher, "Congressional Leadership."

[27] Woolf, *Nuclear Weapons Policy and Programs.*

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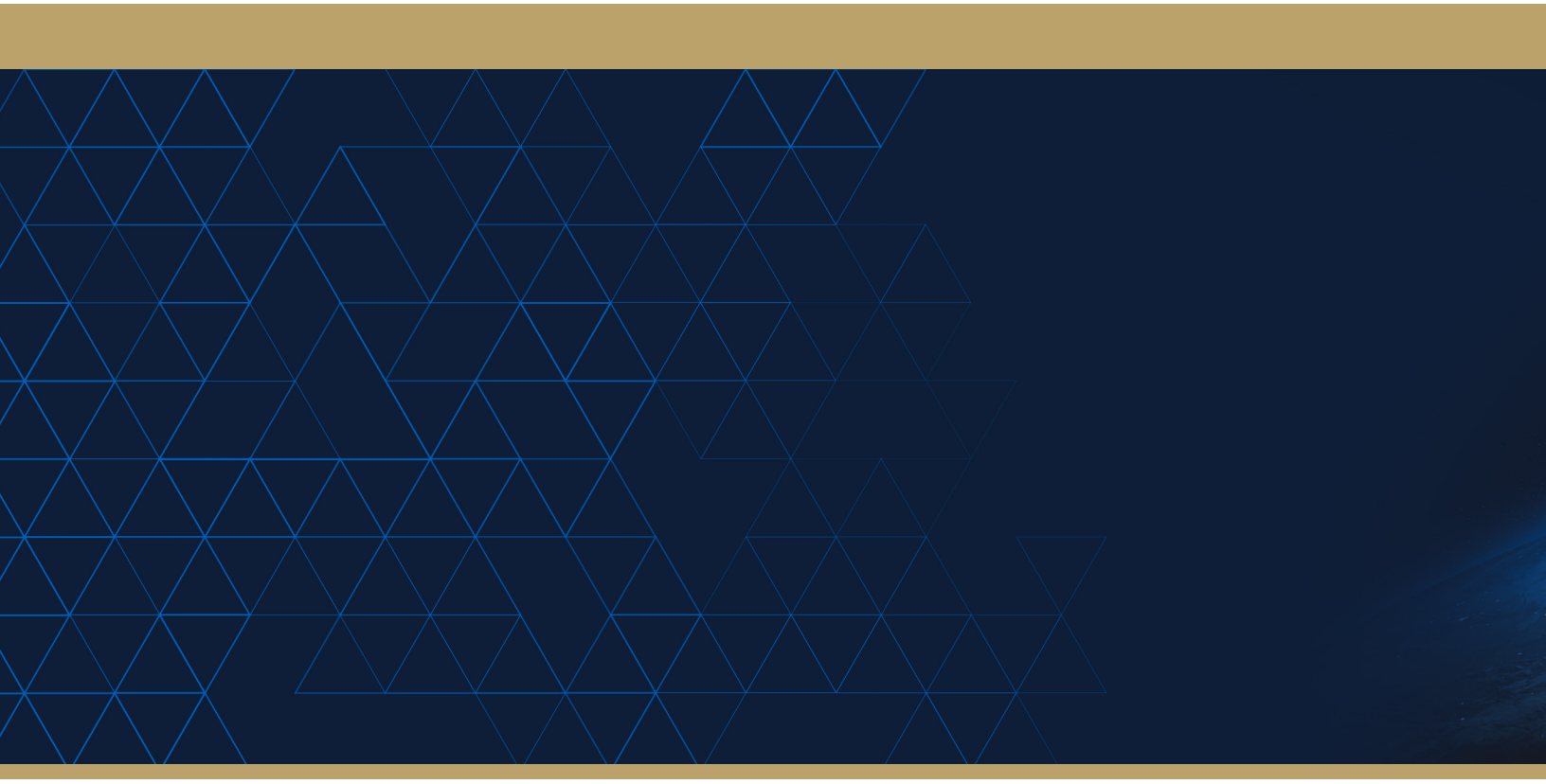

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