

PROJECT ON ADVANCED SYSTEMS AND CONCEPTS FOR COUNTERING WMD (PASCC)



Report Summary

Responding to North Korean Nuclear First Use: Minimizing Damage to the Nuclear Taboo

Institution: Johns Hopkins University Applied Physics Laboratory

Primary Investigators: Erin Hahn and James Scouras

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Summary: This study addresses the issue of responding to the first use of nuclear weapons by North Korea, with an emphasis on restoring the taboo against nuclear use. In support of this goal, we conducted a workshop on April 23–24, 2019, to bring together experts in norm theory, nuclear strategy, and Northeast Asia. Building on workshop discussions, we developed recommendations for US government stakeholders. Primary among these is that the Department of Defense (DoD) take restoration of the nuclear taboo seriously as a US objective after an adversary’s first nuclear use and undertake appropriate analyses and planning in advance to provide effective nonnuclear retaliatory options for the president.

Executive Summary: The conviction that nuclear weapons should not be used except in the most dire of circumstances is widely held today. This perspective both supports and reflects the emergence of the global norm that many refer to as the *nuclear taboo*. Related to—but distinct from—the tradition of nonuse of nuclear weapons and the strategy of deterrence, the taboo is a result of revulsion at the horrific toll nuclear use would take on humanity.

The nuclear taboo is increasingly recognized as a critical element of nuclear stability. Clearly, the nuclear taboo is most vulnerable after it is first violated, but norm theory suggests that the response to a violation can have a strong influence on whether a norm is irrevocably damaged or ultimately reinforced. Thus, this study examines how alternative US responses to the first future use of nuclear weapons might further undermine or, alternatively, restore and perhaps even strengthen the nuclear taboo.

We did not expect a great deal of consistency in expert perspectives on this topic. To capture a broad spectrum of opinion and reasoning, we conducted a workshop for experts in various disciplines to bring different perspectives on this study’s central questions together in face-to-face discussions.

This study/dialogue was funded by the Defense Threat Reduction Agency (DTRA) through the Project on Advanced Systems and Concepts for Countering WMD (PASCC).

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Our focus is on North Korea, one of the more troublesome challengers to US deterrence strategy, as well as a topic of public attention and concern. Workshop participants discussed four presentations on the nature and status of the nuclear taboo. They then considered a spectrum of scenarios that culminate in North Korean nuclear first use. The workshop concluded with discussions of key questions.

Presentations. Four presentations provided current thinking regarding the nuclear taboo. Selected excerpts from these presentations follow:

1. “The State of the Nuclear Taboo Today” presented by Nina Tannenwald
 - Limited research has sought to analyze the mechanisms through which violations contribute to norm erosion and even less research addresses the impact of responses to violations on potential norm survival.
 - Recently, however, public opposition to nuclear first use has been declining, which is a signal that the taboo and all the nuclear norms—nonuse, deterrence, nonproliferation, and disarmament—are under pressure.
2. “Morally Justified Responses to North Korean Nuclear First Use: Reflections on the Nuclear Taboo” presented by Thomas Doyle
 - The challenge for the United States, as a liberal democratic superpower, is to respond to nuclear first use and achieve its national security in ways that also preserve an international society ordered by the rule of law and norms, such as the nuclear taboo.
 - To do this, the United States should plan to adequately respond to North Korean nuclear first use with a mix of conventional military force and diplomatic efforts that, in concert with allies and partners, facilitates the greater internalization and motivating force of the nuclear taboo.
3. “Atomic Anxiety in a Hypothetical Second-Use World: Responses to a North Korean Nuclear Attack” presented by Frank Sauer
 - Drawing on a nonnuclear response option is desirable for many reasons, among which the upholding of the nuclear taboo is only one. Clearly, keeping a robust international norm against nuclear use would be in the strategic interest of the United States.
 - I have little doubt that after a North Korean nuclear attack, if presented with a nuclear response option, his [President Trump’s] decision will be to retaliate with nuclear weapons. In that sense, the most desirable response, a nonnuclear one, would not be the most likely one.
4. “The Nuclear Taboo and Norm Cluster Resiliency: Insulating Against a North Korean Nuclear First Use” presented by Jeffrey Lantis
 - The nonproliferation norm cluster, which includes the nuclear taboo, can be surprisingly resilient as a function of the cohesiveness of central principles and institutionalized support.

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- The act of North Korean norm contestation might have the unexpected effect of strengthening global efforts to reduce the proliferation of nuclear weapons, stress peaceful uses of technology over potential diversions, and embrace the humanitarian movement toward weapons prohibition by pursuing disarmament.

Exploration of Nuclear First-Use Scenarios. Workshop participants considered the four scenarios of North Korean nuclear first use shown in Table 2. These scenarios involve relatively small (one to five) numbers of nuclear weapons because the question of whether to respond with nuclear or conventional weapons is less uncertain in scenarios involving large numbers of first-strike weapons. In addition, the contexts of these scenarios generally involve existential threats to the Kim regime because the plausibility of nuclear use is greatest under such circumstances.

Table 2. North Korean Nuclear First-Use Scenario Analysis

First-Use Scenario	Most Likely Response	Response that Minimizes Damage to the Nuclear Taboo
<p>Korean war redux: In the context of a new Korean war, North Korea launches two nuclear weapons at troop concentrations in the demilitarized zone and north of it, killing fifty thousand troops and ten thousand civilians.</p>	<p>Engage regional powers while simultaneously conducting a conventional strike to secure North Korean nuclear weapons. Reserve the right to use nuclear weapons.</p>	<p>Same. The United States underlines norm of nonuse.</p>
<p>Regime collapse: In the context of resumed nuclear and ballistic missile testing, tightened international sanctions threaten survival of the Kim regime. US satellites detect an intercontinental ballistic missile originating in North Korea, apparently targeting San Diego. The United States reports that it shot down the missile, but others speculate that the weapon malfunctioned.</p>	<p>Conduct an investigation to get the facts. Overtly signal commitment to preempt another launch. Launch a diplomatic public affairs campaign to garner the support of the international community to condemn North Korea. Consult and reassure allies.</p>	<p>Same</p>

First-Use Scenario	Most Likely Response	Response that Minimizes Damage to the Nuclear Taboo
<p>Regime change: Kim, fearing a US-orchestrated regime change operation in progress, fires five nuclear weapons. Extended-range Scud and Nodong missiles strike a port in Japan, a port in South Korea, and a headquarters/airbase in South Korea. Hwasong-12s strike Okinawa and Guam.</p>	<p>Destroy North Korean leadership and nuclear-weapons capabilities/stockpiles by employing nuclear and conventional weapons.</p>	<p>Conduct a ground invasion to topple leadership and destroy nuclear-weapons capabilities using conventional weapons only. Obtain a UN Security Council resolution authorizing invasion of North Korea.</p>
<p>Proliferation to terrorists: A crude two-kiloton nuclear device detonates in Mobile, Alabama, killing ten thousand people and causing thirty thousand additional casualties. US intelligence traces the fissile materials to North Korea and delivery of the bomb to a terrorist organization supported by Iran.</p>	<p>Conduct punishing conventional attacks against North Korea, the terrorists responsible for the attack, and Iran.</p>	<p>Engage the international community in multilateral diplomacy resulting in UN-authorized punitive strikes.</p>

Several observations can be made regarding this scenario analysis. First, for a majority of the scenarios, respondents did not view a nuclear response as the most likely response. This could reveal an unexpected truth, be a result of bias in the workshop composition, or reflect confusion in some workshop participants between the most likely and the most desirable response. In any event, there was a sense that nonnuclear options should be exhausted before considering a nuclear response. In addition, there was an unjustified presumption that conventional military options would be effective and timely. Similarly, there was a presumption that a UN resolution authorizing military action against North Korea could be readily obtained. And finally, the responses that were intended to do the least further harm to the nuclear taboo often did not differ greatly, if at all, from those thought to be most likely. This could again reflect participant bias or suggest that presidential decision-making already—implicitly or explicitly—considers impact on the taboo.

Discussion of Central Questions

Four central questions were posed at the workshop:

1. What characteristics of first-use scenarios are important in deciding among second-use options? Suggested characteristics included:

- What is the enemy capability to reattack with nuclear weapons?
- Location of attack—was it on allied territory, US territory, or the United States itself?

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- Was the weapon used by a state or a terrorist organization?
- What were the levels of military and civilian deaths and casualties?

Many additional relevant characteristics of the first-use scenario were also suggested. The sheer number of characteristics, their inherent complexity and interrelationships, and the various degrees of uncertainty about them make this a complex question for which additional research is warranted. For the same reasons, no two first-use scenarios will likely share all characteristics in common, which means that a one-size-fits-all response doctrine is infeasible.

2. What are the assumptions and logically developed arguments that support the claims that (a) a nonnuclear response will enhance the nuclear taboo and (b) a nuclear response is necessary to restore the nuclear taboo? One major assumption is that a nonnuclear response will help restore the taboo because it demonstrates respect for the taboo and because the alternative choice to use nuclear weapons would represent a further violation of the taboo. However, the group could not dismiss the idea that a nuclear response would restore the taboo, out of the horror and fear it would generate if nothing else. Alternatively, if using a nuclear weapon proves beneficial, then the taboo would be further undermined. But it was also argued that no data exist to suggest that you must respond in-kind to restore a norm (e.g., chemical weapons).

3. What is the role of DoD in reestablishing the nuclear taboo after first use? Several participants did not think DoD has *any* role in reestablishing the taboo. One asserted that “it’s not what DoD thinks about; DoD does not care about the taboo.” This claim was countered with the observation that DoD obviously does care about the taboo because it funded this project and representatives were in the room. Others acknowledged that even if the taboo is primarily within the realm of the president’s responsibility, DoD and other government entities also have a role in considering the implications of second use for the taboo.

4. What options can an ad hoc advisory group offer to respond to North Korean first use to ensure no subsequent use (ever) and not undermine the nuclear taboo? One option offered was to pursue a massive conventional strike while messaging to the international community that the nuclear attack was barbaric and that the United States will respond in a civilized way. It was also suggested that a massive conventional strike would enable the United States to maintain the moral high ground. Alternatively, one participant suggested the United States launch a massive nuclear retaliatory strike followed immediately by diplomatic efforts to join the nuclear ban treaty and reinvigorate global zero discussions. This approach, it was argued, would address the immediate military risk and reestablish the taboo by forswearing nuclear weapons for good.

In any event, the best time to preserve the taboo is before any first use. And after first use, the government’s highest priority will be ensuring no further nuclear use by any adversary.

Observations

Upon completion of the workshop, we made the following additional observations:

- (1) Some participants appeared to confuse the concepts of deterrence and the nuclear taboo. This is because both deterrence and the taboo have the effect of dissuading use of nuclear weapons. However, the mechanisms by which they accomplish this differ. Deterrence operates because of fear of nuclear retaliation. By contrast, the nuclear taboo operates because of ethical and moral revulsion at the consequences of nuclear use.
- (2) The workshop underscored the importance of assessing response options to first use well in advance of any actual crisis in which nuclear use is a possibility. Even with a sophisticated group knowledgeable on many aspects of the topic, it was challenging to develop and assess the impact of retaliation options on the taboo, or to clearly articulate options that might meet multiple objectives, including preservation of the taboo.
- (3) Some concepts seemed to be generally accepted uncritically, in particular the notion that a taboo cannot be supported by violating it. This may or may not be true. One counterargument is that for any taboo to endure, it must be periodically violated so that there is a tangible reminder of the horror that attends its violation. A more nuanced argument would be that nuclear first use would serve this function, so there is no need for any additional reminder by second nuclear use.
- (4) It is important for the future of both deterrence and the nuclear taboo that any first use of nuclear weapons be widely perceived as a military and political failure. Whether conventional capabilities can achieve this is scenario dependent, but there are overwhelming challenges. Moreover, to the extent that conventional weapons would succeed, it might only provoke further nuclear use by North Korea. It is not even clear that nuclear weapons could achieve this objective. Also unanswered is the question of whether there are valid reasons to prefer a nuclear response, even if conventional weapons would be effective.

Recommendations

After consulting with the Defense Threat Reduction Agency (DTRA) and selected workshop participants, we developed the following recommendations for US government stakeholders:

- (1) DoD stakeholders (e.g., US Strategic Command [USSTRATCOM], US European Command, US Indo-Pacific Command, and the Office of the Secretary of Defense [OSD]) as well as the Department of State and the National Security

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Council (NSC) need to take restoration of the nuclear taboo seriously as a US objective after an adversary's first nuclear use and undertake appropriate analyses and planning in advance to provide the president with effective nonnuclear retaliatory options that could reduce the severity and duration of damage to the taboo. It is imperative to conduct the requisite analyses and planning in advance of any nuclear crisis because it is virtually impossible to accomplish this in the throes of many conceivable fast-paced crises.

- (2) After an adversary nuclear strike, USSTRATCOM and the NSC need to be prepared to make recommendations to the president regarding the effects of alternative nuclear and nonnuclear response options on the preservation of the nuclear taboo. This requires, *inter alia*, a thorough understanding of the effects of variables and the relationships among them that characterize alternative first-use scenarios.
- (3) DoD needs to provide effective conventional capabilities for effective response to limited first nuclear use so as not to unnecessarily constrain presidential options. While we understand this could be both difficult and expensive and that other DoD initiatives could be deemed higher priorities, the importance of the taboo to maintaining nuclear stability is a vital national security consideration. Providing such capabilities would entail both development and fielding (for which OSD/Research and Engineering and OSD/Acquisition and Sustainment have lead responsibilities) and associated employment doctrines (for which the Joint Chiefs of Staff and the Combatant Commands are primarily responsible). Ultimately, the decision to field such capabilities would involve both the president and Congress.
- (4) In coordination with the State Department, OSD needs articulate a policy supportive of the nuclear taboo, without undermining deterrence strategy or post-first-use damage-limitation goals. This policy should be reflected in future Nuclear Posture Reviews.
- (5) The intelligence community needs to understand the perspectives of other states—allies as well as adversaries—regarding the nuclear taboo and retaliation after first nuclear use.
- (6) DTRA needs to develop the capability to undertake comprehensive nuclear consequence assessments that include indirect as well as direct effects, delayed as well as prompt effects, and consequences to governance, economies, and other social structures as well as to physical structures and human life.

For the defense analysis and international relations communities, we encourage far greater analytic attention toward all dimensions of the nuclear taboo, including the lesser-explored topic

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of the impact of alternative retaliation options on the taboo. As Thomas Schelling stated, “How to preserve this inhibition, what kinds of policies or activities may threaten it, how the inhibition may be broken or dissolved, and what institutional arrangements may support or weaken it, deserves serious attention.”*

* Schelling, Thomas C., “An Astonishing 60 Years: The Legacy of Hiroshima” (Nobel Prize Lecture, December 8, 2005).

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