

# Stanton Nuclear Security Fellows Seminar

---

## PANEL 4: Nuclear Weapons and the Korean Peninsula

### 1. Jung Jae Kwon, (BCSIA)

#### *Could North Korea Disarm the South? An Operational Analysis of the Worst-Case Scenario of North Korea's Nuclear Employment and Potential Countermeasures*

##### **Research Question**

This project asks two interrelated questions: First, what would be the nuclear capabilities needed by North Korea to disarm South Korea in a nuclear first strike?

Second, can the US-ROK Alliance's military assets deployed in the Korean Theater of Operations (KTO) survive this “worst-case” scenario and retain sufficient capability to retaliate? What are the measures the Alliance can adopt to make the military calculus more difficult for the North?

##### **Motivation**

Analysts like Vipin Narang in 2017 have long warned of a North Korean nuclear first strike amid a limited conventional conflict in the Korean Peninsula.<sup>1</sup> Since then, North Korea has made its doctrine of preemptive escalation clearer and tested capabilities, such as new delivery systems, that would enable this posture. Most recently, on August 31, Kim explicitly spoke of the need to create chaos in South Korea by attacking key military and strategic facilities through “simultaneous high-impact strikes” in the event of conflict.

These developments have caused worries. Within Seoul, there is fear that by adopting this strategy of limited nuclear use, North Korea could neutralize U.S.-ROK forces in Korea, at least for a short time. It could then try to achieve a fait accompli, such as a land grab, and negotiate with the U.S. to end war on terms favorable to the North. There is increasing concern that North Korea may engage in this type of opportunistic aggression during a Taiwan contingency, in which U.S. military assets in the broader region would be occupied with China.

---

<sup>1</sup> Vipin Narang, “Why Kim Jong Un Wouldn’t Be Irrational to Use a Nuclear Bomb First,” *Washington Post*, September 8, 2017, sec. Perspective, [https://www.washingtonpost.com/outlook/why-kim-jong-un-wouldnt-be-irrational-to-use-a-nuclear-bomb-first/2017/09/08/a9d36ca4-934f-11e7-aace-04b862b2b3f3\\_story.html](https://www.washingtonpost.com/outlook/why-kim-jong-un-wouldnt-be-irrational-to-use-a-nuclear-bomb-first/2017/09/08/a9d36ca4-934f-11e7-aace-04b862b2b3f3_story.html).

## **Goals and Approaches**

The project will proceed in two steps.

First, it will examine what North Korea's campaign of a nuclear disarming strike on South Korea might look like. The paper will outline the operation by identifying key targets North Korea would try to strike and how it would employ its strike assets. It would calculate the desired force for North Korea to conduct such a mission.

Second, it would then analyze whether North Korea can generate this force. This section delves into the operational details by discussing North Korea's employment of its nuclear delivery systems, especially its mobile missile launchers. It would also identify measures that the U.S.-ROK Alliance can implement to complicate the military calculus for the North.

## **Methodology**

This project uses the method of operational planning, or campaign analysis, to answer the research question.

By analyzing the operational challenge of this "campaign," the project presents the likelihood of success and identifies the "variables" that could make the calculus more difficult for North Korea. I use the statements made by North Korea and other commentary provided by analysts to develop a list of potential targets for North Korea. I also use declassified Single Integrated Operational Plans (SIOPs) as a reference for North Korea's plans for targeting. I use the U.S. Army Field Manual on Pershing II, the land-based Medium-Range Ballistic Missile that the United States operated during the Cold War, and other expert analysis to examine the tactical details of North Korea's nuclear employment.

## **Tentative Conclusion**

My tentative conclusion is that it would be very difficult for North Korea to execute this operation because it faces a critical operational dilemma related to control and dispersion. For North Korea, a "salvo of missiles" from missile launchers would have the highest chance of success given the early warning, missile defense, and conventional strike capabilities of the U.S.-ROK Alliance. However, coordinating the firing of such a large number of missile systems would be difficult because its missile launchers would have to be dispersed in the event of conflict. Moreover, the disparate systems would have different operating procedures for launch. The U.S.-ROK intelligence assets would likely detect this level of activity and coordination.

## **Importance and Policy Implications**

This project will have significant contributions to policy.

First, it will yield policy insights into how the U.S.-ROK Alliance could strengthen deterrence vis-à-vis North Korea. It highlights the nature of the many operational and tactical challenges that North

Korea faces in its employment of nuclear weapons. For instance, the Alliance can try to make these calculations more difficult by increasing the number of targets for the North. It can implement passive defense measures, such as hardening, concealment, and dispersion, and increase resiliency in its command, control, communications, and computers.

Second, it identifies measures the Alliance can implement without compromising strategic stability. As deterrence theorists have long pointed out, deterrence must be accompanied by corresponding assurances. Defense planners, especially in Seoul, tend to focus on offensive employment concepts for neutralizing North Korea's nuclear and missile threat without carefully considering their side effects. This project identifies areas where the Alliance can increase deterrence while mitigating detrimental effects on strategic stability.

## 2. So Jin Lee, BCSIA

### *The North Korea Conundrum: Carrots or Sticks?*

#### **I. Research Question and Background**

What is the utility and relative efficacy of positive inducements and sanctions in international politics? Conceptualizing foreign policy tools as on a spectrum, with “positive inducements” at one end and “military force” at the opposite extreme, “inaction” should lie somewhere in between. In short, inducements can be thought of as “carrots,” while sanctions and military force as “sticks.” While the dichotomy between these approaches has long been studied at the individual-level in other fields (e.g. parenting), there lacks a systematic study of carrots vs. sticks at the state-level. While the security studies field has traditionally focused on one tool at a time, I study the two instruments simultaneously, as it better reflects the reality of the two coexisting most of the time. My project aims to bridge the policy-academy gap by translating a perennial policy-level problem of “carrots vs. sticks” to an academic question assessing the utility and relative efficacy of positive inducements versus sanctions.

My book project examines the effect of carrot and stick-like foreign policies in international relations. Specifically, I study how U.S. positive inducements, such as foreign aid, and sanctions are perceived by the public in target states (China, India, and South Korea), and how those perceptions are translated to state behavior within the nuclear domain. Dominant works on risk-taking and decision-making—like loss aversion—have shown that people are more sensitive to potential losses than gains, which would suggest that sanctions should be utilized more to achieve preferred outcomes. I argue, however, that inducement policies that require concessions from the target state can be framed to gain the target state’s public support and allow target state leaders to “save face.” In contrast, sanctions can provoke nationalism, creating a rally around the flag effect, resulting in negative consequences for the United States. In my experimental studies, I find that carrots work better than sticks in getting the target state to acquiesce to the sender state’s demands. However, not all carrots are equal; my findings suggest that new and direct types of carrots (e.g. new aid) elicit more support for concessions from the target state than indirect carrots that remove an existing stick (e.g. lifting existing sanctions). Because these results are at the individual-level and found under carefully thought-out experimental settings, during my Stanton Fellowship year, I intend to examine how inducements and sanctions have played out in practice at the state-level by taking a deep dive into the North Korean nuclear crisis.

#### **II. Methodology**

The United States has sought to address and manage the North Korea “nuclear problem” by employing a combination of inducement and punishment tools for over thirty years. These

instruments have provided openings for negotiations at different historical stages, but ultimately have equally failed in stopping North Korea's nuclear weapons acquisition. Thus, while the issue is still ongoing and critics would consider North Korea as a failed case of both inducements and sanctions, North Korea is an ideal case to evaluate the utility and relative efficacy of positive inducements and sanctions for three main reasons.

### Variation in Carrots and Sticks

In my research, I have conceptualized economic carrots and sticks as four distinct categories: inducement (in the form of aid), sanction, lifting of sanction, and cutting aid. The North Korean case has an abundance of each of these four tools spanning decades of utilization in practice. Going beyond what I have been able to test through my experimental work, the North Korean case has at least two other important variations to note. First, a wide variety of types of carrots and sticks can be found. While my experiments focused solely on economic inducements, with a particular emphasis on foreign aid, the North Korean case includes an array of inducements, such as economic assistance, food aid, energy provisions, normalization of diplomatic relations, and security guarantees in the form of a non-aggression pact. Second, in contrast to my experimental studies where the offering of incentives was initiated by the sending state, the North Korean case includes cases in which the target state initiates the request of carrots as well.

### Variation in Sender States and Strategies

The North Korean case has two additional important variations that extend beyond my experimental manipulations. First, there is variation in the number and type of sender states. The 1994 Agreed Framework was a bilateral agreement between the United States and North Korea whereas the Six Party Talks involved five sender states: China (host), Japan, Republic of Korea (ROK), Russia, and the United States. These states sometimes functioned as singular sender states and, at other times, were part of various sender state coalitions. As well, there is variation in the sender state's relationship with North Korea: China and Russia are allied sender states while Japan, ROK, and the U.S. are adversarial sender states. Second, both allies and adversaries employed a mixed strategy of using both carrots and sticks. For example, China—an important DPRK ally—signed on to the 2006 United Nations Security Council resolutions condemning and sanctioning North Korea (UNSCR 1695 and UNSCR 1718), while also increasing the level of trade with North Korea to historic highs with the start of the Six Party Talks.

### Temporal Variation and Changes in Primary Instrument

It is important to note that while both inducements and sanctions were simultaneously used, there was a predominant reliance on one of these instruments (inducement or sanction) during distinct chronological periods. Given the variation in the primary instrument employed and its associated outcomes, I will subdivide the North Korean case to six discrete time periods post-Cold War. Taking both the U.S. and ROK presidential terms, I have tentatively divided the case to six time periods: 1991-1998, 1998-2003, 2003-2007, 2007-2009, 2009-2017, and 2017-2021. In doing

so, I will be able to examine the within country variation of strategy and outcome while holding most other variables constant.

Drawing upon my archival work of primary and secondary sources at the National Archives in the Busan, Daejeon, and Seongnam branches of South Korea (April-May 2021), interviews with a range of six current and former government officials (March-September 2021), scholars (November 2020-June 2021) in both Korean and English, I have begun writing my North Korean case study from a South Korean perspective. I plan to extend and complete this preliminary case study by interviewing U.S. officials and scholars about negotiating with North Korea and visiting the Clinton, Bush, and Obama Presidential Libraries for archival work and include the U.S. perspective. Additionally, I hope to return to South Korea to conduct further interviews specifically with North Korean defectors.

### **III. Argument and Tentative Conclusion**

Much like the presence of selection effects in studies of sanctions efficacy (Nooruddin 2002; Drezner 2003), I contend that similar selection effects may be at play in studies of inducements efficacy. This is primarily because we often fail to account for the temporal variation in success and tend to evaluate the instrument's effectiveness dichotomously. As such, instead of focusing on the binary outcome of success and failure, I propose an approach that examines the degrees of success and failure across time. This nuanced approach to studying each instrument's efficacy allows us to better understand the limitations and potential for success, if partial, each instrument possesses. For instance, if the promise of carrots led to the 1994 Agreed Framework, then we should evaluate that specific outcome as a success, rather than labeling it as a failure simply because it did not ultimately prevent North Korea from developing nuclear weapons. By perceiving it as a partial success, we could then evaluate the longevity of success even a promise of carrot could provide. It would be important to evaluate the feasibility of delivering the promised carrots to calculate the durability of the deal. My findings imply that the United States' inclination towards punitive measures may be counterproductive.

### **IV. Extant Works, Contribution, and Policy Implications**

There exists a rich literature on sanctions, foreign aid, and the North Korean nuclear crisis. However, providing a comprehensive review of all the different arguments and evidence is beyond the scope of this memo. My project aims to integrate and synthesize the previous works by working at the seam of these three areas and focusing on the relative efficacy of inducements and sanctions from both the target and sender state perspectives. Containing proliferation is a very challenging goal, with varying degrees of failures observed. By analyzing the outcomes on a spectrum of successes and failures, rather than a binary classification, will help find the most potent mix of carrots and sticks to achieve the sender state's objectives.

My approach of dividing the North Korean case to six sub-cases and incorporating the U.S.-ROK domestic political alignment factor into the analysis allows us to think beyond dyadic effects, which better reflects the reality policymakers face. My findings warrant a closer examination of second-order effects of using inducements or punishments with respect to the U.S. extended nuclear deterrence in Northeast Asia and in the credibility of U.S. nuclear assurances over South Korea.

Given that there needs to be a North Korea policy, no matter how impossible it may seem, I hope that my project will contribute to the enduring global debate not only related to North Korea, but also nuclear negotiations in general. A more nuanced understanding of the effectiveness of positive inducements could help further the global nonproliferation regime's agenda and contribute to a more secure international community.

## **V. Challenges**

My project faces two significant challenges---one analytical, one policy---that I would appreciate being addressed during the feedback I receive at the Seminar. The first analytical challenge is in devising a consistent, systematic method for determining the primary instrument employed during each period. Because a mix of both instruments are used in each of the six periods, and the frequency of either carrots or sticks may not necessarily correlate with the intensity of their application, a close examination of how each instrument was manipulated is essential. Any feedback on how to come up with a set of rules to apply to each period would be very helpful.

Another challenge of arguing carrots work better than sticks is regarding policy implementation and unintended negative consequences. From the sender state perspective, it will be hard to convince and gain the support of their domestic audience (e.g. political opposition, constituents and taxpayers) when proposing to offer carrots as a quid pro quo, even if the outcome objectively favors the sender state's objectives. Additionally, the sender state cannot ignore its international audience, as offering carrots may diminish the sender state's reputation, potentially encouraging other to engage in opportunistic "bad behavior" in the hopes of receiving carrots (i.e. extortion) after observing the sender state's willingness to provide them. Furthermore, even if a carrot-based policy is adopted despite domestic opposition, ensuring the complete delivery of the promised incentives will prove to be difficult.