Asian Journal of Peacebuilding Vol. 13 No. 1 (2025): 1-17
doi: 10.18588/202505.00a603 Special Issue – Introduction

Rethinking Nuclear Deterrence in a Shifting Global Order: Theoretical, Empirical, and Policy Perspectives

Jeheung Ryu

This special issue examines the strategic choices and policy options for South Korea and the US in responding to North Korea's rising security challenges. With President Trump back in office and shifts in policy priorities, South Korea currently faces difficulties in establishing credible deterrence measures against North Korea. This introductory article provides theoretical discussions on nuclear deterrence and explores the complexities of achieving deterrence within the framework of asymmetric alliances, in which actors have the alliance dilemma—abandonment and entrapment risks. To better understand the three articles in this special issue, these theoretical discussions provide readers with necessary context, addressing various aspects of the alliance dilemma, public support for foreign policies, and alternative deterrence policy options, such as independent nuclearization and nuclear sharing agreements.

Keywords deterrence, risk of abandonment and entrapment, nuclear sharing, alliance, North Korea

Introduction

The nuclear nonproliferation regime was established and primarily led by the US and the Soviet Union in the Cold War era. The regime played a significant role in preventing and controlling the spread of nuclear weapons worldwide. In this regime, the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) took a leading role in curbing nuclear proliferation while simultaneously facilitating the peaceful use of atomic energy. As the cases of India, Israel, and Pakistan demonstrate, however, the NPT and nuclear superpowers could not entirely control proliferation. In these cases, they either did not join or did not comply with the regime. Nonetheless, except for several such cases, the nuclear nonproliferation regime has substantially contributed to global arms

ISSN 2288-2693 Print, ISSN 2288-2707 Online

control efforts and set precedents for the cooperation of major nuclear powers. Following the end of the Cold War, the US continued to work with Russia and newly independent countries to secure and dismantle nuclear arsenals, warheads, and fissile materials that remained in the region. Furthermore, US diplomatic pressure led Libya to voluntarily terminate its nuclear weapons program in 2003. In 2015, the Obama administration played a leading role in negotiating the Joint Comprehensive Plan of Action (JCPOA) to limit Iran's nuclear program in exchange for sanctions relief and other provisions. Although not all nonproliferation efforts have been successful, as with North Korea, the US has consistently made diplomatic and coercive efforts toward nonproliferation.

Recently, the nonproliferation regime has gained renewed attention and scrutiny with the return of US President Trump to office. During his second term, President Trump's well-documented skepticism regarding the provision of a nuclear umbrella to US allies is widely expected to continue, presenting significant risks to the global nonproliferation regime (Vikram 2024). Specifically, Trump's questioning of the strategic value of the North Atlantic Treaty Organization (NATO) threatens its integrity and potentially encourages European nations (such as Poland) to pursue independent nuclear deterrents (Cienski and Kość 2025). In East Asia, Trump's possible withdrawal of US forces from South Korea could drive Seoul to seek its own nuclear capabilities in the absence of credible US security guarantees. Indeed, in January 2023, South Korean President Yoon suggested that the country should consider deploying tactical nuclear weapons or developing its own nuclear capabilities if the security situation regarding North Korea deteriorates. In the Middle East in 2018, President Trump unilaterally decided to withdraw from the JCPOA. This move caused serious concerns in Iran and resulted in pushing it closer to a nuclear ambition. Many experts worried that the US withdrawal from the Iran nuclear deal would increase chances of a nuclear arms race among Iran's neighboring countries. In addition, President Trump's reported sharing of sensitive nuclear information with US ally Saudi Arabia following the US withdrawal from the JCPOA has further provoked Iran and aggravated concerns about weakening nonproliferation regimes.

Whether and how the existing nonproliferation regime accomplishes its original purpose under these circumstances has drawn attention. As many policymakers of US allies become skeptical of the US' willingness and capabilities for protecting its allies, countries like South Korea might actually begin reconsidering the status quo and examine alternative security options, such as independent nuclearization or nuclear-sharing agreements similar to the NATO model. Such policy options, however, could have extensive political and diplomatic consequences, endangering the NPT regime or triggering an arms race with its neighbors. Nonetheless, the recent escalation of nuclear threats from North Korea does call for an urgent examination of multilateral and regional security mechanisms. Any alternative—such as reinforcing US security

commitments, strengthening diplomatic ties, or exploring a new arms control regime—must, crucially, be an optimal and feasible policy for sustaining stability on the Korean Peninsula. In this regard, this special issue aims to help readers gain a better understanding of the challenges and constraints involved in the South Korean government's search for optimal nuclear deterrence policies, with a particular focus on the independent development of nuclear weapons and nuclear sharing.

Among many aspects of these challenges and constraints, this special issue examines how the public perceives the South Korean government's foreign policy decisions. In the field of international relations, the influence of public opinion on foreign policymaking has drawn increasing attention. As political leaders in democracies are likely to respond to the voices of the public, the scope of policy choices become further constrained. In line with this trend, the article by Kim and Huffmon provides empirical evidence on public opinion in the US regarding the independent nuclearization of South Korea, which is shown to be influenced by perceptions of the costs associated with both the current deterrence mechanism and the nuclear threats from North Korea. These results provide a deeper understanding of public opinion and its potential role in influencing foreign policies relating to the security dilemma of entrapment for the US. To help readers grasp the theoretical foundations of the challenges and constraints of the security dilemma discussed in Kim and Huffmon's study, the following sections of this introductory article outline the logic of entrapment and abandonment. The article by Lind and Press, meanwhile, contributes to this discussion of the dilemma by analyzing the credibility issue caused mainly by South Korea's risk of abandonment. Their analysis provides a theoretical basis for why nuclear sharing is a more viable option for South Korea than independent nuclearization. These two articles give us insights into the challenges and constraints faced by South Korea. The article by Idomoto and Kang shifts our attention to the critical need for assessing the security environment on the Korean Peninsula through theoretical perspectives—how we analyze the security dilemma fundamentally determines the means of overcoming it. Idomoto and Kang's article reveals the importance of analyzing underlying security phenomena and dynamics from theoretical perspectives. In the next section, I discuss the concept of deterrence and its implications in the nuclear era.

The Concept and Discussion of Deterrence

Deterrence is generally defined as inducing fear or stress among enemies to suppress desires or impulsivity for launching an attack by consciously threatening harm through the imposition of restrictions. In the field of national security, deterrence involves "discouraging the enemy from taking military action by

posing for him a prospect of cost and risk outweighing his prospective gain" (Snyder 1961, 3). The key aspect of deterrence per this definition is to decrease the benefits that the opposing party expects to gain from aggression while increasing all types of associated costs.

In the classical literature, deterrence has two distinct approaches: denial and punishment (Snyder 1961; Mearsheimer 1983). *Deterrence by denial* seeks to deter aggression by making success infeasible, thereby undermining the opponent's confidence in attaining its goals on the battlefield. The purpose of denial is to make adversaries perceive that the costs of attacking outweigh the potential benefits. Fundamentally, this strategy is about protecting a commitment through securing an ability to defend and preventing an enemy attack by influencing an adversary's initial intentions (Mazarr 2018). *Deterrence by punishment* is a strategy to prevent adversaries from engaging in aggressive actions by threatening to inflict damage or retaliate if attacked. Unlike deterrence by denial, which seeks to deter aggression by making success impossible, deterrence by punishment relies on the threat of harsh punishment. For deterrence by punishment to be effective, the threat must involve demonstration of both the capability and willingness to inflict costs. Some scholars argue, however, that these two deterrence strategies are conceptually ambiguous and difficult to distinguish, as the emphasis on *inflicting costs* in the deterrence by punishment approach can overlap with elements of the deterrence by denial approach. To address this issue, Lupovici (2023) proposes two dimensions to differentiate the two strategies—the first is whether the deterring state employs offensive or non-offensive means, and the second one is the timing of the deterring state's use of these means.

For deterrence to be effective at dissuading potential adversaries from taking aggressive action, several prerequisites must be satisfied. First, an indication of a threat conveyed to an enemy must be *credible* (Shimshoni 1988). To convey a credible threat, states have to demonstrate that they "would *prefer* to execute at the time it is to be executed" (Kilgour and Zagare 1991, 307). Second, to send a credible signal, the deterring states must possess the *capability* to effectively punish a potential adversary (Schelling 1960). This form of coercion relies upon presenting the resolve and capability to inflict damage on the targeted state. Third, deterring states' resolve and willingness to counteract must be effectively and unambiguously *communicated*. Failure to effectively signal this resolve may undermine deterrence by leaving adversaries uncertain about the consequences of their actions.

Exploring the definition of and conditions for deterrence reveals that it is closely associated with *rational* behavior. Deterrence stability could be achieved with complete information and effective communication among warring states because either side would be able to calculate the potential costs of conflict and the value of maintaining the status quo (Kilgour and Zagare 1991). Strategic stability relies on the assumption that adversaries would act rationally so that initiating

an attack would never be an option. Rationality in game theory traditionally centers on maximizing utility payoffs. However, real-world complexities—such as crisis escalation, misperception, and domestic political motivations—complicate this framework. In practice, strategic decision-making is often influenced by miscalculations and incomplete information that create vulnerabilities within deterrence structures (Lebow and Stein 1987; Zagare 1996).

With the proliferation of nuclear weapons between two major nuclear powers—the US and the Soviet Union—theoretical analyses of deterrence strategies have evolved. In the early stages of nuclear development and based on the unprecedented destructive power of nuclear weapons, the concept of massive retaliation was introduced to conceptualize deterrence. As Brodie (1946) noted, nuclear weapons fundamentally transformed the nature of war. Due to their formidable destructive power, they paradoxically make the outbreak of all-out war least likely. This led to the argument that nuclear weapons should only serve as a deterrent, rather than a means of conventional war (ibid.), which was later conceptualized as mutual assured destruction (MAD) (Brodie 1959). According to MAD, the more countries possess nuclear weapons, the less likely they are to have war because the shared fear of mutual annihilation deters war. To attain this strategic balance, countries with nuclear weapons should refrain from using them first. They should pledge to not initiate a war, but to retaliate with overwhelming power if attacked. While the stability of this strategic equilibrium relies exclusively on rational decision-making, several cases exhibit the risks of miscalculations, misperceptions, and misinformation, as the Cuban Missile Crisis arguably demonstrated (Allison 1969; Allison and Zelikow 1971).

From a realist perspective, deterrence theorists have sought to formalize the conditions for strategic balance. In this process, it becomes evident that the balance of nuclear capabilities is a key factor for guaranteeing stability. Also, maintaining second-strike capabilities, which refer to the assured capacity to respond to a nuclear attack with overwhelming retaliation, becomes critical for deterrence. The incentives to not initiate a first strike is contingent on mutual possession of second-strike capabilities, and thus neither side would gain a decisive advantage. Classical deterrence theorists claimed that the spread of nuclear weapons would enhance stability by making large-scale war extremely costly (Rosen 1977; Intriligator and Brito 1981; Waltz 1981; Bueno de Mesquita and Riker 1982). Despite these expectations, however, policymakers have consistently sought to limit nuclear proliferation. If nuclear weapons indeed provided countries with a degree of deterrence, their uncontrolled proliferation would undermine the strategic dominance of nuclear superpowers and would end up disrupting the existing balance of power.

The Dynamics of the Relationship between Patron and Client States

In the previous section, deterrence theory was discussed primarily among two or more disputing countries. The strategic calculus becomes significantly complicated, however, when considering third-party actors, such as military allies. Military alliances, formed to strengthen collective defense capabilities, inherently introduce complexity, especially in the context of asymmetric alliances (Snyder 1990; Walt 1990). In asymmetric alliances, disparities in power between participating states create unique strategic considerations and vulnerabilities. In this section, I expand upon deterrence theory by incorporating the role of third-party states and explore how their involvement modifies the analytical frameworks. To do so, I first discuss the essence of military alliances and examine how they change deterrence dynamics.

For security cooperation to achieve its intended goals, alliances must be credibly mobilized for contingencies. In the previous section, credibility referred to a state's ability to send reliable and convincing signals to potential adversaries for the purpose of securing deterrence. In the context of this section, credibility refers to the degree of trust between the patron and client states, reflecting whether a client state believes that its patron state will honor its security commitments in times of war. Prior to the escalation of crises, members of an alliance must have credible assurance that mutual support will materialize. Credibility is thus pivotal to the effective functioning of alliances. Establishing credibility requires that alliance members clearly signal their willingness and capacity to fulfill their security commitments. If they renege on or fail to fulfill their commitments, it will end up not only breaking alliances but also risking their reputations (Fearon 1997; Gibler 2008; Crescenzi et al. 2012). Therefore, alliance members must strategically find an optimal level of commitment. Excessively weak commitments may fail to deter adversaries, whereas overly strong commitments could inadvertently entangle countries in unwanted conflicts, posing significant security risks.

One of the central challenges confronting alliance members is the "entrapment and abandonment dilemma" (Snyder 2007). Entrapment refers to the fear of being dragged into conflicts by alliance partners. In this process, the unwilling countries have no choice but to support their partners' adventurous or risky behaviors and actions that do not align with their original policy interests or goals. In contrast, abandonment means the fear that alliance partners will not fulfill their security duties when crises occur. In an asymmetric alliance, these dilemmas are particularly prevalent. The structural asymmetry magnifies the challenges inherent in the dilemma, as clients frequently fear abandonment and thus may either overcommit to concessions or pursue other independent security measures (Snyder 1991; Yarhi-Milo, Lanoszka, and Cooper 2016). Meanwhile, patrons remain cautious about entrapment, carefully calibrating their security assurances to avoid becoming embroiled in conflicts driven by the actions or

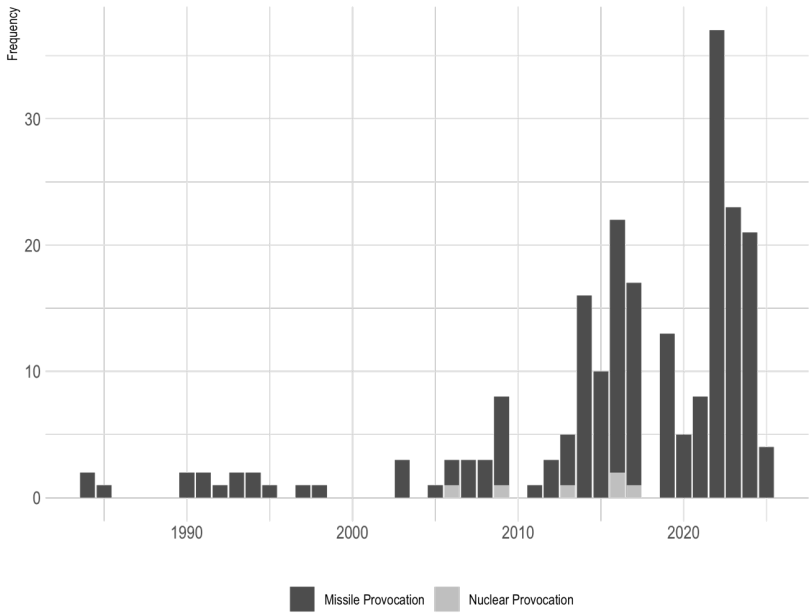
policies of their clients.

Alliance formation essentially seeks to maintain a balance of power and deter potential adversaries (Snyder 1990; Walt 1990). The introduction of nuclear weapons, however, significantly changes strategic calculations within alliances. First, the conventional logic of entrapment and abandonment does not entirely hold in the context of nuclear deterrence between patron and client states. While client states may still fear abandonment, patron states are less preoccupied with entrapment risk when nuclear weapons are involved. This is largely due to the altered foundation of deterrence credibility in which the credibility of a deterrence commitment is based not on entrapment risk but on the client state's strong motivations for survival.[1] Second, as conventional military strength can be considered less potent in nuclear competitions, client states seek to fill the strategic gap. South Korea, for instance, confronted increased insecurity following North Korea's nuclear development efforts that began in the early 1990s. Similarly, upon the establishment of NATO, member states recognized that conventional military power alone was insufficient to counter the nuclear threat posed by the Soviet Union. In both cases, without pursuing indigenous nuclear weapons, South Korea and European countries had to depend entirely on the nuclear capabilities and security assurances provided by their patron, the US. As a result, their ability to achieve deterrence is limited and exclusively dependent on their alliance partners.

Following the end of World War II, the US prioritized nuclear nonproliferation as a central and enduring strategic objective (Schrafstetter and Twigge 2004; Gavin 2015). To achieve this goal, the US employed a variety of policy tools, including diplomatic initiatives, normative frameworks and treaties, coercive measures (such as sanctions and preventive military actions), and extended deterrence through alliances and security guarantees (Gavin 2015). Specifically, in 1957 the US formalized nuclear sharing arrangements with NATO allies, which served the purposes of deterring West Germany from developing an independent nuclear capability and strengthening Europe's defense against the Soviet nuclear threat (Bader 1966). Under these arrangements, nuclear warheads remained under strict US custody and control but could be used for NATO's defense in wartime (Alberque 2017). On the Korean Peninsula, however, the US adopted a different approach with extended deterrence (Huth 1988). Instead of applying the NATO model to South Korea, the US decided to provide security assurance and extended deterrence, backed by explicit promises of significant retaliation in the event of conflict. Nevertheless, concerns over the credibility of US commitments led South Korean President Park Chung-hee to consider an indigenous nuclear weapons program in the early 1970s, despite ongoing US tactical nuclear deployments in South Korea (Jang 2016).

To prevent an accidental outbreak of nuclear war and the provocation of North Korea in the early 1990s, US President George H. W. Bush announced the

Figure 1. Missile and Nuclear Provocations by North Korea, 1984-2025



Source: Author, with data from the Beyond Parallel (2019).

withdrawal of all forms of US tactical nuclear weapons deployed worldwide. In response to the announcement in 1991, South Korea's President Roh announced the Declaration on the Denuclearization and Peacebuilding of the Korean Peninsula.[2] Over the subsequent decades, US extended deterrence has played an essential role in addressing North Korea's nuclear threats. The credibility of US commitments has been reinforced through the forward deployment of the US forces and frequent public affirmations. These reassurances have enabled South Korea to refrain from pursuing a nuclear weapons program on its own. Nonetheless, uncertainties regarding the evolving North Korean threats, shifting US strategic policies and priorities, and unforeseen geopolitical events have raised questions about the reliability and durability of US security commitments.

Figure 1 illustrates the number of missile and nuclear provocations by North Korea between 1984 and 2025. As shown, North Korea's missile provocations were initially relatively minimal. However, starting in 2005, the number of missile provocations began to grow rapidly, exhibiting a significant escalation trend. In the single year of 2022, thirty-eight missile provocations by North Korea were recorded. In the case of nuclear provocations, although much fewer in number, they have also continued over the past decade. This data reflects the aggravated security tensions on the Korean Peninsula. North Korea's military advancements, particularly with its intercontinental ballistic missile (ICBM) capabilities, have

exacerbated public debate in South Korea about independently developing nuclear weapons (Lee 2023).

Another factor influencing South Korea's perceptions of credible commitments originates from the patron state itself. Would the US genuinely be willing to defend South Korea and employ nuclear retaliation against North Korea in contingencies? If North Korea develops the capability to directly strike the US mainland with ICBMs, would Washington remain committed to South Korea's defense and security? Related to US public opinion on alliances, surveys conducted by the Chicago Council on Global Affairs (Friedhoff 2024) report that almost 70% of US respondents believe that the US security relationship with South Korea helps strengthen US national security. However, in recent years, the surveys reveal a declining trend in the US public's willingness to use US troops to defend South Korea if North Korea were to invade (ibid.). Although not limited to the Korean Peninsula, these questions and concerns have long challenged the reliability of the nuclear umbrella (Roehrig 2017). Such concerns intensified during President Trump's first administration, as his emphasis on the financial costs of alliances and his reticence about overseas engagements led to speculation that the US might avoid entrapment in unwanted conflicts, which undermined confidence in US defense commitments to its traditional allies. Confronted with the escalation of nuclear threats from North Korea and potential risks regarding the credibility of US defense commitments, strengthening deterrence and adapting to the changing security environment have become increasingly important for South Korea (Bowers and Hiim 2021). The South Korean public has also become increasingly aware of these changes. According to a survey conducted by the Asan Institute for Policy Studies, public confidence in the US nuclear umbrella decreased during the Trump administration (Kim, Kang, and Ham 2023). That survey also asked about policy options for the South Korean government to enhance its national security, in which results suggest that the South Korean public has a clear preference for independent nuclear development over nuclear sharing.[3]

These findings and discussions reveal significant implications for future policy options for South Korea. The three articles in this special issue contribute to our understanding by addressing critical aspects, such as risk assessment on the Korean Peninsula, domestic factors constituting public support for US foreign policy, and a variety of available deterrence options.

Contributions to the Special Issue

An existing body of research evaluates the instability and potential threats of conflict on the Korean Peninsula (for example, see Bennett and Lind 2011; Mazarr et al. 2018; Engman and Lampinen 2023). These studies widely agree that

North Korea's expanding nuclear capabilities are one of the primary sources of inter-Korean tensions, leading to regional instability and conflict risk. Recent debates also emphasize that, as North Korea consolidates its nuclear arsenal, South Korea's current deterrence posture is insufficient for attaining strategic stability (Cha and Kang 2018; Jackson 2018; Leveringhaus 2019). This growing asymmetry in military capabilities not only exacerbates strategic uncertainty but also raises essential questions about the effectiveness of South Korea's security posture and the broader implications for regional stability. As North Korea's nuclear ambition continues to grow, questions have been raised as to whether the traditional deterrence paradigm remains viable and whether Seoul needs to bring in security alternatives to defend its national interests. These trends also raise concerns about the sustainability of the current deterrence mechanism—extended deterrence provided by the US—particularly in light of changing public opinion in both South Korea and the US and the increasing feasibility of alternative security arrangements, such as nuclear sharing. Here, a fundamental question arises: How can South Korea best address rising security threats while maintaining strategic stability and dealing with concerns about the credibility of US security commitments? The articles in this special issue explore the theoretical frameworks, public opinion dynamics, and policy options invoked in this important question.

Building on this discussion of deterrence and stability, the first article of this special issue, by Idomoto and Kang, addresses fundamental questions about the perceived instability and potential risks on the Korean Peninsula. Drawing on major theories of international relations—specifically the bargaining theory of war (Fearon 1995; Powell 2002; Lake 2010)—they challenge the underlying perception that North Korea's belligerent behaviors signal imminent conflict. Rather, they argue that Pyongyang and its adversaries share a clear understanding of each other's capabilities and intentions, thus obviating the problem of information and commitment that typically precipitate war. In addition, Idomoto and Kang argue that missile tests and nuclear threats must be regarded as indications of costly signals intended to strengthen deterrence, and not as portents of escalating tensions. Their work also demonstrates how the balance of power is stabilized by North Korea's obsolescent conventional military capabilities and reliance on asymmetric means, and how this contributes to regional stability. Lastly, Idomoto and Kang contend that it is necessary to have a closer look at the deeper strategic dynamics of inter-Korean relations to grasp the Korean Peninsula's longer-term trajectory, and that a purely phenomenological focus on North Korea's weapons programs largely overlooks the long-term mechanisms of deterrence that have ensured stability in the region.

One of the underlying assumptions in Idomoto and Kang's argument is the continued US military presence and strategic involvement in the form of extended deterrence for South Korea. As long as the US continues to uphold its

security commitments and maintain its engagement policy against North Korea's nuclear threats, military tensions on the Korean Peninsula can remain stable. The long-term visibility of US extended deterrence in East Asia, however, has also become a subject of growing interests among policymakers and scholars (Huth 1988; Cheon 2011; Manning 2014; Hamre and Nye 2023). While extensive research has explored extended deterrence from theoretical and policy-oriented perspectives, empirical analyses of its effectiveness and perceptions among the public are still limited (Ko 2019; Allison, Herzog, and Ko 2022). This gap in the literature highlights the need for further investigation into the practical implications of extended deterrence and its effects on regional security structures.

In this regard, the second article of this special issue, by Kim and Huffmon, provides valuable insights into how US taxpayers shape their stance on their government's nuclear nonproliferation policy. Specifically, their study examines the dynamics of entrapment and abandonment in patron-client relations, investigating whether and to what extent the American public supports the US government's foreign policy toward potential nuclearization of South Korea. Using survey experiments conducted with South Carolina voters, the study finds that concerns over the financial and military costs of extended deterrence significantly increase public support for South Korea's pursuit of independent nuclear weapons. In addition, when respondents were informed about North Korea's capabilities to target the US territory with nuclear missiles, they became more likely to support South Korea's nuclearization. These findings contribute to the broader discourse on alliance politics, demonstrating that economic and security considerations play a crucial role in shaping public opinion on nuclear policy. By highlighting the conditions under which voters favor the proliferation of allied nuclear capabilities, Kim and Huffmon's work provides important empirical evidence for understanding the evolving nature of US security commitments and public attitudes toward strategic deterrence. Notably, these results align with the broader shift in the US foreign policy under the first Trump administration that pushed forward with reducing security burdens on allies, encouraging them to take greater responsibility for their own defense (Kaufman 2017; Bergmann 2025). The study's findings suggest that the government policy of burden-sharing and reduced military entanglements would continue to shape American public opinion on nuclear strategy and alliance commitments.

Drawing on extensive discussions of deterrence means, the final article by Lind and Press expands the scope of possible options available to the South Korean government. As North Korea continues to advance its nuclear capabilities, particularly through the development of its ICBM program, Lind and Press argue that South Korea must move beyond its traditional reliance on US extended deterrence and consider more robust deterrent measures. After systematically comparing three strategic choices, they conclude that adopting a nuclear sharing agreement with the US presents the most feasible and strategically advantageous

option. The rationale behind their argument is rooted in a shifting strategic perspective. North Korea's development of ICBMs capable of reaching the US mainland constitutes a fundamental game-changer as it undermines the credibility of US security guarantees. Therefore, Lind and Press claim that the forward deployment of a tactical nuclear arsenal would strengthen deterrence by signaling an enhanced US commitment and a reinforced allied joint effort, which would thus reduce uncertainty on the Korean Peninsula. By integrating South Korea into a nuclear-sharing framework, the US and South Korea could ensure strategic stability and improve their capacity to effectively address crisis scenarios.

Conclusions

The three articles in this special issue emphasize the importance of sustained US security guarantees in maintaining global nuclear nonproliferation regimes. As uncertainties concerning US strategic commitments rise, especially under the second Trump administration, traditional allies are increasingly pressured to reconsider their current security strategies. This dynamic is most pronounced in regions with escalating nuclear threats, such as the Korean Peninsula, where North Korea's advanced missile and nuclear capabilities pose a direct challenge to both regional stability and global security. For South Korea, the primary policy goal is to strengthen extended deterrence and ensure US commitments to the defense of South Korea. Following President Yoon's audacious speech in 2023, the leaders of the two countries held a summit and agreed on the Washington Declaration, which aims to deepen cooperation on extended deterrence through the establishment of the Nuclear Consultative Group. Nevertheless, it remains unclear whether and to what extent these security ties will endure, particularly given President Trump's shifting security goals and priorities. Although the Trump administration has recently reaffirmed its commitment to the complete denuclearization of North Korea, it is still unclear whether President Trump will undertake the necessary actions to realize this objective. Instead, widespread speculation suggests that he may pursue a bilateral deal with Kim Jong-un. In exchange for economic sanctions relief, President Trump might propose a freeze on North Korea's current nuclear programs and a halt to the development of missile systems that could deliver nuclear warheads to the US. Such an arrangement would imply that the US is prioritizing its own strategic goals over that of complete denuclearization, which would pose serious security risks for South Korea. Responding to this uncertain context, this special issue provides critical insights into viable policy options and relevant considerations while addressing the associated challenges and constraints.

The articles in this issue provide distinct yet complementary perspectives on deterrence and stability on the Korean Peninsula. Idomoto and Kang challenge

conventional approaches that describe North Korea's military posturing as a signal to imminent conflict. They argue that Pyongyang's military activities send costly signals aimed at reinforcing deterrence rather than escalating tensions, which ultimately lead to a stable condition. Their study emphasizes the necessity for deeper, theoretical, and long-term analysis of deterrence mechanisms rather than a narrow focus on piecemeal approaches. Kim and Huffmon explore American public opinion on extended deterrence, demonstrating how economic and security concerns shape support for South Korea's potential nuclearization. While military policies are often regarded as being outside the public's interest, they become important factors for the public when considering the costs of war. Finally, Lind and Press assess alternative strategic measures for South Korea. They advocate for a US-South Korea nuclear-sharing agreement as the most viable deterrence option, arguing that forward deployment of US tactical nuclear weapons would strengthen security commitments and reduce regional instability.

As the global security environment is rapidly changing, the sustainability of nuclear deterrence and extended deterrence remains a pressing challenge. The studies in this special issue highlight the complexities of deterrence in the face of shifting strategic realities. North Korea's continued development of nuclear capabilities, coupled with uncertainties about US strategic commitments, has intensified regional insecurities and compelled South Korea to explore alternative deterrent measures. The findings presented in these articles reinforce the notion that effective deterrence requires more than just military capabilities—it relies on credibility, signaling, and strategic alignment among allies. Moving forward, policymakers must carefully assess the trade-offs between nuclear-sharing arrangements and independent nuclearization while ensuring that deterrence frameworks remain adaptive to emerging threats.

Acknowledgments

This Special Issue was supported by the Institute for Peace and Unification Studies (IPUS) at Seoul National University under the project of "Revisiting the North Korean Nuclear Crisis: Strategic Responses Among Countries on the Korean Penninsula [0563B-20230016]."

Notes

1. I am grateful for the Reviewer's comments on this issue.
2. South Korea initiated the denuclearization objective on the Korean Peninsula. In November 1991, President Roh announced the Declaration on the Denuclearization and Peacebuilding of the Korean Peninsula, followed by the Declaration on the Nonexistence

of Nuclear Weapons. These unilateral efforts were strategically intended to engage North Korea in the denuclearization process, which contributed and led to the historic South-North Joint Declaration on the Denuclearization of the Korean Peninsula in January 1992 (Kim 2017).

3. More specifically, the survey results show that 64.3% of South Korean respondents support independent nuclearization, while 61.1% agree with a nuclear-sharing option (Kim, Kang, and Ham 2023). When presented with the possibility of sanctions being imposed if the South Korean government attempts to develop nuclear weapons, support for independent nuclearization drops to 54.7%. A survey conducted in the US by the Chicago Council on Global Affairs (Friedhoff 2024) shows that the American public is divided and uncertain about whether their allies should have nuclear weapons: 17% supports US allies possessing nuclear weapons, while 16% oppose it.

References

Alberque, William. 2017. "The NPT and the Origins of NATO's Nuclear Sharing Arrangements." *Proliferation Papers*, No. 57, Institut français des relations internationales. https://www.ifri.org/en/studies/npt-and-origins-natos-nuclear-sharing-arrangements (accessed April 19, 2025).

Allison, Graham T. 1969. "Conceptual Models and the Cuban Missile Crisis." *American Political Science Review* 63 (3): 689-718. doi: 10.2307/1954423.

Allison, Graham T. 1971. *Essence of Decision: Explaining the Cuban Missile Crisis*. Boston: Little, Brown.

Allison, David, Stephen Herzog, and Jiyoung Ko. 2022. "Under the Umbrella: Nuclear Crises, Extended Deterrence, and Public Opinion." *Journal of Conflict Resolution* 66 (10): 1766-96. doi: 10.1177/00220027221100254.

Bader, W. B. 1966. "Nuclear Weapons Sharing and 'The German Problem.'" *Foreign Affairs* 44 (4): 693-700. doi: 10.2307/20039202.

Bennett, Bruce W., and Jennifer Lind. 2011. "The Collapse of North Korea: Military Missions and Requirements." *Internatinonal Security* 36 (2): 84-119.

Bergmann, Max. 2025. "The Transatlantic Alliance in the Age of Trump: The Coming Collisions." Center for Strategic & International Studies, February. https://www.csis.org/analysis/transatlantic-alliance-age-trump-coming-collisions (accessed March 14, 2025).

Beyond Parallel. 2019. "Database: North Korean Provocations." Center for Strategic & International Studies. https://beyondparallel.csis.org/database-north-korean-provocations/ (accessed February 10, 2025).

Bowers, Ian, and Henrik Stalhane Hiim. 2021. "Conventional Counterforce Dilemmas: South Korea's Deterrence Strategy and Stability on the Korean Peninsula." *International Security* 45 (3): 7-39. doi: 10.1162/isec_a_00399.

Brodie, Bernard, ed. 1946. *The Absolute Weapon: Atomic Power and World Order*. New York: Harcourt, Brace and Co.

Brodie, Bernard. 1959. *Strategy in the Missile Age*. Princeton, NJ: Princeton University Press.

Bueno de Mesquita, Bruce, and William H. Riker. 1982. "An Assessment of the Merits of

Selective Nuclear Proliferation." *Journal of Conflict Resolution* 26 (2): 283-306. doi: 10.1177/0022002782026002005.

Cha, Victor, and David Kang. 2018. *Nuclear North Korea: A Debate on Engagement Strategies*. New York: Columbia University Press.

Cheon, Seongwhun. 2011. "Changing Dynamics of U.S. Extended Nuclear Deterrence on the Korean Peninsula." *Pacific Focus* 26 (1): 37-64. doi: 10.1111/j.1976-5118.2011.01055.x.

Cienski, Jan, and Wojciech Kość. 2025. "Poland Seeks Access to Nuclear Arms and Looks to Build Half-Million-Man Army." *Politico*, March 7. https://www.politico.eu/article/donald-tusk-plan-train-poland-men-military-service-russia/ (accessed March 15, 2025).

Crescenzi, Mark, Jacob Kathman, Katja Kleinberg, and Reed Wood. 2012. "Reliability, Reputation, and Alliance Formation." *International Studies Quarterly* 56 (2): 259-74. doi: 10.1111/j.1468-2478.2011.00711.x.

Engman, Mats, and Frida Lampinen. 2023. "Risk Reduction and Crisis Management on the Korean Peninsula." 38 North Special Report, July. The Stimson Center. https://www.38north.org/wp-content/uploads/pdf/23-0727_Engman-and-Lampinen_FINAL.pdf (accessed April 19, 2025).

Fearon, James. 1995. "Rationalist Explanations for War." *International Organization* 49 (3): 379-414.

Fearon, James. 1997. "Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs." *Journal of Conflict Resolution* 41 (1): 68-90. doi: 10.1177/0022002797041001004.

Friedhoff, Karl. 2024. "Americans See Negative Consequences of US Troop Withdrawal from South Korea." The Chicago Council on Global Affairs, October 16. https://globalaffairs.org/research/public-opinion-survey/americans-see-negative-consequences-us-troop-withdrawal-south-korea (accessed April 1, 2025).

Gavin, Fracis J. 2015. "Strategies of Inhibition: U.S. Grand Strategy, the Nuclear Resolution, and Nonproliferation." *International Security* 40 (1): 9-46. doi: 10.1162/ISEC_a_00205.

Gibler, Douglas. 2008. "The Costs of Reneging: Reputation and Alliance Formation." *Journal of Conflict Resolution* 52 (3): 426-54.

Hamre, John, and Joseph S. Nye Jr. 2023. "CSIS Commission on the Korean Peninsula: Recommendations on North Korea Policy and Extended Deterrence." January. Washington, DC: CSIS Commission on the Korean Peninsula, Center for Strategic & International Studies. https://csis-website-prod.s3.amazonaws.com/s3fs-public/2023-01/230119_Korean_Commission_2023.pdf?VersionId=93zTcEue3STUbr6v8IfjQ6z6B_3mNTr4 (accessed April 19, 2025).

Huth, Paul. 1988. "Extended Deterrence and the Outbreak of War." *American Political Science Review* 82 (2): 423-43. doi: 10.2307/1957394.

Intriligator, Michael, and Dagobert Brito. 1981. "Nuclear Proliferation and the Probability of Nuclear War." *Public Choice* 37: 247-60.

Jackson, Van. 2018. *On the Brink: Trump, Kim, and the Threat of Nuclear War*. Cambridge, UK: Cambridge University Press.

Jang, Se Young. 2016. "The Evolution of US Extended Deterrence and South Korea's Nuclear Ambitions." *Journal of Strategic Studies* 39 (4): 502-20. doi: 10.1080/01402390.2016.1168012.

Kaufman, Joyce. 2017. "The US Perspective on NATO under Trump: Lessons of the Past and Prospects for the Future." *International Affairs* 93 (2): 251-66. doi: 10.1093/ia/

iix009.
Kilgour, D. Marc, and Frank C. Zagare. 1991. "Credibility, Uncertainty, and Deterrence." *American Journal of Political Science* 35 (2): 305-34. doi: 10.2307/2111365.
Kim, Jee-Hyun. 2017. "Joint Declaration on the Denuclearization of the Korean Peninsula." *Journal of Unification Law* 3: 141-68.
Kim, J. James, Chungku Kang, and Geon Hee Ham. 2023. "Transitioning Attitudes on North Korea: Perceived Threat and Preferred Response." Asan Report, April. The Asan Institute for Policy Studies. https://en.asaninst.org/wp-content/uploads/2023/04/Asan-Report-Transitioning-Attitudes-on-North-Korea.pdf (accessed April 19, 2025).
Ko, Jiyoung. 2019. "Alliance and Public Preference for Nuclear Forbearance: Evidence from South Korea." *Foreign Policy Analysis* 15: 509-29. doi: 10.1093/fpa/ory014.
Lake, David. 2010. "Two Cheers for Bargaining Theory: Assessing Rationalist Explanations of the Iraq War." *International Security* 35 (3): 7-52.
Lebow, Richard Ned, and Janice Gross Stein. 1987. "Beyond Deterrence." *Journal of Social Issues* 43 (4): 5-71. doi: 10.1111/j.1540-4560.1987.tb00252.x.
Lee, Jeong-Ho. 2023. "N Korea's Military Provocations Boost S Korea's Nuclear Arsenal Push." *Radio Free Asia*, December 20. https://www.rfa.org/english/news/korea/sk-nuclear-push-12202023013144.html (accessed March 17, 2025).
Leveringhaus, Nicola Ann. 2019. "Beyond De-nuclearization: Debating Deterrence and North Korea in Asia's New Nuclear Age." *Asian Security* 15 (3): 365-9. doi: 10.1080/14799855.2019.1594783.
Lupovici, Amir. 2023. "Deterrence through Inflicting Costs: Between Deterrence by Punishment and Deterrence by Denial." *International Studies Review* 25 (3): 1-21. doi: 10.1093/isr/viad036.
Manning, Robert. 2014. "The Future of US Extended Deterrence in Asia to 2025." Atlantic Council, Brent Scowcroft Center on International Security. https://www.atlanticcouncil.org/wp-content/uploads/2014/10/Future_US_Ext_Det_in_Asia.pdf (accessed April 19, 2025).
Mazarr, Michael. 2018. "Understanding Deterrence." *Perspective*, April. Rand Corporation. https://www.rand.org/pubs/perspectives/PE295.html (accessed April 19, 2025).
Mazarr, Michael, Gian Gentile, Dan Madden, Stacie L. Pettyjohn, and Yvonne K. Crane. 2018. "The Korean Peninsula: Three Dangerous Scenarios." *Perspective*, May. Rand Corporation. https://www.rand.org/pubs/perspectives/PE262.html (accessed April 19, 2025).
Mearsheimer, John. 1983. *Conventional Deterrence*. New York: Cornell University Press.
Powell, Robert. 2002. "Bargaining Theory and International Conflict." *Annual Review of Political Science* 5 (1): 1-30. doi: 10.1146/annurev.polisci.5.092601.141138.
Roehrig, Terence. 2017. "The U.S. Nuclear Umbrella over South Korea: Nuclear Weapons and Extended Deterrence." *Political Science Quarterly* 132 (4): 651-84.
Rosen, Steven. 1977. "A Stable System of Mutual Nuclear Deterrence in the Arab-Israeli Conflict." *American Political Science Review* 71 (4): 1367-83. doi: 10.2307/1961485.
Schelling, Thomas. 1960. *The Strategy of Conflict*. Cambridge: Harvard University Press.
Schrafstetter, Susanna, and Stephen Twigge. 2004. *Avoiding Armageddon: Europe, the United States, and the Struggle for Nuclear Non-proliferation, 1945-1970*. Westport, CT: Praeger.
Shimshoni, Jonathan. 1988. *Israel and Conventional Deterrence: Border Warfare from 1953*

to 1970. New York: Cornell University Press.
Snyder, Glenn H. 1961. *Deterrence and Defense: Toward a Theory of National Security*. Princeton, NJ: Princeton University Press.
Snyder, Glenn H. 1990. "Alliance Theory: A Neorealist First Cut." *Journal of International Affairs* 44 (1): 103-23.
Snyder, Glenn H. 1991. "Alliances, Balance, and Stability." *International Organization* 45 (1): 121-42.
Snyder, Glenn H. 2007. *Alliance Politics*. Ithaca, NY: Cornell University Press.
Vikram, Akshai. 2024. "Trump's Record, Rhetoric Suggest Second Term Could Prove Fatal to Nuclear Nonproliferation." *Just Security*, October 10. https://www.justsecurity.org/103798/trump-nuclear-nonproliferation/ (accessed March 15, 2025).
Walt, Stephen. 1990. *The Origins of Alliance*. Ithaca, NY: Cornell University Press.
Waltz, Kenneth. 1981. The Spread of Nuclear Weapons: More May Be Better. Adelphi Papers 171. doi: 10.1080/05679328108457394.
Yarhi-Milo, Keren, Alexander Lanoszka, and Zack Cooper. 2016. "To Arm or to Ally? The Patron's Dilemma and the Strategic Logic of Arms Transfers and Alliances." *International Security* 41 (2): 90-139. doi: 10.1162/ISEC_a_00250.
Zagare, Frank. 1996. "Classical Deterrence Theory: A Critical Assessment." *International Interactions* 21 (4): 365-87. doi: 10.1080/03050629608434873.

Jeheung Ryu is Assistant Professor at the Department of Social Studies Education, Ewha Womans University. Before joining Ewha, he was a postdoctoral research fellow at Princeton University. His recent publications include "The Effect of Economic Sanctions on Companies' FDI Decisions: The Case of Sanctions against Russia" (2024, co-authored in *Conflict Management and Peace Science*) and "The Political Effects of Digital Authoritarianism: Theory and Practice" (2024, co-authored in *Ewha Journal of Social Sciences*). Email: jryu@ewha.ac.kr

Submitted: March 20, 2025; Revised: April 8, 2025; Accepted: April 9, 2025