



Evolving DPRK Nuclear Doctrine

By
Dong-hyeon Kim

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EXECUTIVE SUMMARY

This paper investigates how an emerging nuclear weapon state—the Democratic People’s Republic of Korea (DPRK)—establishes and develops its nuclear doctrine upon completion of its nuclear arsenal. Since DPRK’s first nuclear crisis in the early 1990s and its first nuclear test in 2006, the nuclear nonproliferation community has focused on how to dismantle DPRK’s nuclear weapons program. Only recently have scholars focused on managing to live with a nuclear North Korea, shifting attention from nonproliferation to defense and deterrence. However, little scholarship has been produced vis-à-vis DPRK’s nuclear doctrine due to the lack of information and concern over recognizing DPRK as a nuclear weapon state. Understanding DPRK’s nuclear doctrine offers insights to developing an appropriate deterrence and defense strategy, as well as ways to revise strategies to dismantle its nuclear weapons program. Discerning DPRK’s nuclear doctrine not only contributes to the understanding of current security challenges on the Korean Peninsula, but more importantly offers an opportunity to expand scholarship on nuclear strategy.

This paper attempts to systematically answer a question that has often been raised by the national security establishment: what is DPRK’s nuclear doctrine? The key findings offer both theoretical and policy implications. First, the findings suggest that DPRK’s nuclear posture has evolved over time towards a more aggressive posture, despite popular misperception that the role of nuclear weapons in DPRK is purely for deterrence. The evolution of its doctrine towards preemptive strike indicates that premature redeployment of US tactical nuclear weapons into the Korean theater, an increasingly popular argument in Seoul, would only exacerbate DPRK’s aggressive posture with marginal benefit on extended deterrence.

Second, DPRK has adopted a posture that is common among weaker nuclear weapon states, as France and Pakistan did to counter stronger adversaries. Existing theories on brinkmanship and resolve offer a logic as to why DPRK’s nuclear posture is similar to other weaker nuclear weapon states. Third, DPRK’s nuclear doctrine poses a fundamental question to existing theories of nuclear deterrence: how little is enough to credibly threaten nuclear retaliation in the absence of necessary capabilities? More work can be done to explain DPRK’s seemingly inflated behavior—to credibly threaten nuclear retaliation when such capabilities are incomplete.

INTRODUCTION

The DPRK's nuclear doctrine

Since the DPRK's first nuclear crisis in early 1990s and its first nuclear weapon test in 2006, the nuclear nonproliferation community has focused on dismantling the DPRK's nuclear weapon programs. The issue of nonproliferation took priority in policies among the US, its allies, and partners in addressing the DPRK's emerging nuclear threat. However, after nearly three decades, there is little to show for these efforts.

It was not until recently that scholars began to pay attention to the prospect of managing a nuclear North Korea.¹ This means that the framework to address the DPRK's nuclear threat must change from nonproliferation to defense and deterrence. Deterrence advocates argue that since the US has successfully deterred the Soviet Union/Russia and China, there is little reason to fear that deterrence against the DPRK's small-sized nuclear arsenal would be any less successful. Critics however – mainly bureaucrats and politicians – maintain that signaling any flexibility will not only legitimize the DPRK's nuclear weapon programs but also weaken the global nonproliferation regime even as potential latent nuclear powers are watching closely.

As a result of the bias toward nonproliferation, little scholarship has been produced about the DPRK's nuclear doctrine. First, any attempt to study its nuclear doctrine automatically invites strong opposition for fear that to do so would legitimize the DPRK's nuclear weapon state status. Second, the DPRK does not produce any documents to articulate its nuclear doctrine.

Understanding the DPRK's nuclear doctrine offers insights to develop an appropriate deterrence and defense strategy, as well as ways to revise strategies to dismantle the DPRK's nuclear weapons program. A sound strategy of deterrence and defense should be based on a fairly calculated doctrine of one's adversary. Therefore, a systematic study of the DPRK's nuclear doctrine offers short- to medium-term stability. In addition, reverse-engineering its nuclear doctrine can highlight security concerns of the DPRK. Thus, it offers clues for negotiation leading to the ultimate dismantlement of the DPRK's nuclear weapon programs.

Discerning the DPRK's nuclear doctrine not only contributes to the understanding of current security challenges on the Korean Peninsula, but more importantly offers an opportunity to expand scholarship on nuclear strategy. Nuclear strategy, also referred to as nuclear doctrine, was limited to the US and the Soviet Union for a long period. Lawrence Freedman²'s work laid the groundwork for understanding the evolution of US nuclear strategy, while Scott Sagan³

¹ “What Do Americans Really Think about Conflict with Nuclear North Korea? The Answer Is Both Reassuring and Disturbing - Bulletin of the Atomic Scientists,” accessed August 28, 2019, <https://thebulletin.org/2019/07/what-do-americans-really-think-about-conflict-with-nuclear-north-korea-the-answer-is-both-reassuring-and-disturbing/>.

² Lawrence Freedman, *The Evolution of Nuclear Strategy*, 3rd ed. (Basingstoke, Hampshire [England] ; New York: Palgrave Macmillan, 2003).

³ Scott Douglas Sagan, *Moving Targets: Nuclear Strategy and National Security* (Princeton, N.J.: Princeton University Press, 1989); Scott Douglas Sagan, “SIOP-62: The Nuclear War Plan Briefing to President Kennedy,” *International Security* 12, no. 1 (n.d.): 22–51.

attempted to decipher declassified documents on US nuclear targets. Only recently scholarship began to highlight nuclear strategies of China⁴ and India⁵. A rigorous investigation of emerging nuclear weapon state's doctrine will contribute to a better understanding of nuclear strategy in the 21st century.

In this paper, I aim to investigate how an emerging nuclear weapon state – the DPRK – develops its nuclear doctrine following the establishment of its nuclear arsenal. To begin, the paper reviews the literature on the nuclear doctrine of global and regional powers. It investigates how structural factors such as balance of power influence the formulation of nuclear doctrine at its early stage. To illustrate, I will briefly discuss the nuclear doctrines of France and Pakistan and compare the findings with DPRK's official statements and documents. Then, I will discuss distinctive characteristics of DPRK's doctrine and highlight its implications.

For the purpose of this paper, it is necessary to clarify the terminology of nuclear strategy and nuclear doctrine. Nuclear strategy entails the acquisition of nuclear weapon, operation of the acquired nuclear weapon, and incorporation of nuclear arsenal into existing national security infrastructure. Nuclear doctrine refers specifically to how a nuclear weapon state deploys its nuclear arsenal. This paper examines DPRK's nuclear doctrine rather than its comprehensive nuclear strategy.

Previous work on nuclear strategy and doctrine

The systematic study of the evolution of nuclear strategy is a well-established field in security studies. Freedman⁶ offered an excellent summary on how nuclear strategy has developed over time, with a focus on the US. Freedman's work on the evolution of nuclear strategy provides insight into how other nuclear weapon states would evolve their nuclear doctrines over time. However, Freedman spared little time on the second and third nuclear age, therefore its application to the case of DPRK is indirect at most.

Scott Sagan's work⁷ offers a framework that may be more applicable to the case of DPRK. Sagan was able to estimate US nuclear doctrine based on declassified documents. Beyond Sagan's foundational work on why states pursue nuclear weapons, a scholarly gap to fill is how states use nuclear weapons shortly after acquiring nuclear weapons. Vipin Narang⁸ attempted to identify variables in determining nuclear posture, with a focus on regional powers. Narang's work added to the literature of nuclear strategy, both in terms of incorporating regional powers as players and establishing a framework to explain why nuclear weapon states choose a particular doctrine. As such, Sagan and Narang offer the groundwork for understanding a state's nuclear doctrine, whether a superpower or a regional power.

⁴ Fiona S. Cunningham and M. Taylor Fravel, "Assuring Assured Retaliation: China's Nuclear Posture and U.S.-China Strategic Stability," *International Security* 40, no. 2 (2015): 7–50, https://doi.org/10.1162/ISEC_a_00215.

⁵ C. Clary and V. Narang, "India's Counterforce Temptations: Strategic Dilemmas, Doctrine, and Capabilities," *International Security* 43, no. 3 (19 2019): 7–52, https://doi.org/10.1162/isec_a_00340.

⁶ Freedman, *The Evolution of Nuclear Strategy*.

⁷ Sagan, *Moving Targets*; Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy."

⁸ Vipin Narang, *Nuclear Strategy in the Modern Era: Regional Powers and International Conflict*, Princeton Studies in International History and Politics (Princeton, New Jersey: Princeton University Press, 2014).

Recent scholarship began to pay attention to the DPRK's nuclear strategy, albeit from US point of view. Daryl Press and Kier Lieber⁹ examined counterforce options against DPRK with the help of remote sensing technology. While Press and Lieber contributed to the literature of nuclear politics by investigating the implication of technology to enhance counterforce with DPRK as a case study, they paid little attention to the DPRK's nuclear doctrine. Overall, the study of regional nuclear strategy is in its infancy with relative focus on South Asia.

Revisiting French and Pakistani nuclear doctrine

While there are multiple variables involved in determining a state's nuclear doctrine including international security environment and domestic politics, I will focus on the international security environment as a structural variable in this paper. The hypothesis is that nuclear weapon states facing similar international security environments are likely to adopt a similar nuclear doctrine. To illustrate the nuclear doctrines of weaker nuclear weapon states, I will first discuss nuclear doctrines of France and Pakistan, both of which faced adversaries with superior nuclear and conventional forces.

France

Early French nuclear strategy put great emphasis on deterring a Soviet attack as early as possible. French strategic thought on nuclear doctrine derives from two retired generals, Pierre Gallois and André Beaufre. Despite differences between them on the notion of 'proportional deterrence' or 'flexible response,' both generals argued for the need to incorporate local nuclear forces within French nuclear doctrine¹⁰.

Two main rationales lie behind French doctrine. First, French forces were much weaker than Soviet forces both in conventional and nuclear terms. The rationale is well aligned with "escalate to deescalate," intending to demonstrate the willingness to risk further escalation with the hope that the Soviet Union would back down out of surprise or fear. Invoking such an option with existing French forces required sending the strongest signal possible. In addition, France's mistrust of NATO contributed to the French interest in invoking nuclear options early in a crisis. The French view of collective defense was much more skeptical than that of the British.

Early French nuclear doctrine offers a clue that DPRK's nuclear doctrine may also be based on the international security environment despite its initial motivation. The major motivation for French nuclear armament was national prestige,¹¹ in the aftermath of the German occupation and defeat in Indo-China. Charles de Gaulle's initiative on the French nuclear program was an endeavor to rebuild the glory of French nation. Despite its initial motivation, French nuclear doctrine quickly adopted the notion of local nuclear forces in reflection of threats against French national sovereignty.

⁹ Keir Lieber and Daryl Press, "The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence," *International Security* 41, no. 4 (2017): 9–49, https://doi.org/10.1162/ISEC_a_00273.

¹⁰ Freedman, *The Evolution of Nuclear Strategy*.

¹¹ Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security* 21, no. 3 (January 1, 1997): 54–86, <https://doi.org/10.1162/isec.21.3.54>.

Pakistan

Pakistan's initial nuclear strategy also put strong emphasis on deterring an Indian attack with tactical nuclear weapons. Pakistan still remains substantially weaker than India both in terms of conventional and nuclear forces despite the acquisition of nuclear weapons. In this sense, nuclear weapon itself was no game changer. Instead, Pakistan has so far resorted to tactical nuclear weapons "at the lowest level of engagement"¹² to make the best use of its limited nuclear arsenal.

Scott Sagan identifies the Pakistani tendency to rely on the nuclear option at a lower level of conflict as not entirely based on the international security environment. Rather, Sagan¹³ explains that parochial interests within Pakistan's military and its influence over policy affected Pakistani nuclear doctrine. Pakistan is still open to "large scale first-use nuclear options"¹⁴ with an undefined last-resort logic. Nevertheless, Sagan's analysis adds to rather than contradicts Pakistan's inclination to resort to nuclear options early in a crisis.

DPRK'S nuclear doctrine

Given that the DPRK has not published any official document on its nuclear posture, there is a limited number of resources that can be consulted to confirm what type of nuclear doctrine it will adopt. In the following section, I will review DPRK's authoritative documents, high-level statements, and critical information disclosed via its news agencies.

Documents and statements

One of the most authoritative DPRK document on its doctrine is the "DPRK Law on Consolidating the Position of Nuclear Weapons State for Self-Defense."¹⁵ Published on the occasion of the Seventh Session of the 12th Supreme People's Assembly on April 1, 2013, the law echoes the notion of deterrence, repulsion, and retaliation. Article II states that its nuclear force aims to deter and repel external threats via massive retaliation, however it does not specify whether nuclear force will be used against both conventional and nuclear attack. Article IV identifies the supreme leader as the final decision maker in launching a nuclear attack against hostile nuclear forces, however, it does not clarify whether an adversarial nuclear weapon state's conventional attack would be met with its nuclear forces. Article V maintains that the DPRK shall not use nuclear weapons against or threaten non-nuclear weapon states unless a state engaged in an invasion or an attack against the DPRK. While Article V may indicate a potential for 'No First Use' policy, its policy of no first use is contingent on non-nuclear weapon states' invasion or attack against the DPRK.

¹² Sadia Tasleem, "Pakistan's Nuclear Use Doctrine - Carnegie Endowment for International Peace," accessed September 3, 2019, <https://carnegieendowment.org/2016/06/30/pakistan-s-nuclear-use-doctrine-pub-63913>.

¹³ Scott D. Sagan, *Inside Nuclear South Asia* (Stanford University Press, 2009).

¹⁴ Sagan.

¹⁵ <최고인민회의>자위적핵보유국의 지위를 공고히 할데 대한 법 채택," 조선신보, April 1, 2013, http://chosonsinbo.com/2013/04/kcna_130401-5/.

The DPRK's high-level statements reveal its tendency to resort to nuclear weapons in a crisis. On March 31, 2013, Kim Jong Un articulated the pivotal role of nuclear forces in terms of a war deterrent strategy as well as an operational combat readiness posture of nuclear forces in terms of war-waging strategy.¹⁶ On the contrary to the aforementioned Article V on 'No First Use,' Chairman Kim made it clear that nuclear weapons play an essential role in DPRK's war-waging strategy. Other statements by high-level DPRK officials often referred to the idea of a "preemptive strike." The DPRK's Ministry of Foreign Affairs issued a statement¹⁷ in the midst of increasing inter-Korean tensions in 2013 that the DPRK's military options against the ROK include strong nuclear preemptive strikes to protect the Republic's sovereignty. In March 2016, the DPRK National Defense Commission mentioned¹⁸ the idea of a nuclear preemptive strike as one of its options to counter a provocative US – ROK combined forces exercise. The DPRK's statements were conditioned on an incoming attack or threat to its supreme national interest. Nevertheless, its definition of a threat to supreme national interest has often been loose (the DPRK often stated that US – ROK combined forces exercises are an existential threat).

On occasion, DPRK has released its presumed target lists both in the region and beyond. A photo released by KCNA¹⁹ shows Kim Jong Un sitting in front of the *Strategic Forces Strike Plan* on the Korean Peninsula where it indicates that the range of the DPRK's missile reaches all corners of the ROK. In 2013, the DPRK released a photo of Kim reviewing the *Strategic Forces U.S. Mainland Strike Plan*. The target list included Hawaii (then PACOM, now INDOPACOM), San Diego (Pacific Fleet), Barksdale Air Force Base (Headquarters of the US Air Force Global Strike Command), and Washington DC. (nation's capital). The *Strategic Forces U.S. Mainland Strike Plan* offers, by far, the most authoritative target list released by the DPRK as it highlights the DPRK's intention. While the selection of counterforce targets in the mainland US does not mean there are concrete plans, it is significant because targeting doctrine is "a reflection of the government's judgements about the requirements of deterrence,"²⁰ and shows the logic of deterrence calculated by the government of the DPRK.

¹⁶ "경애하는 김정은동지께서 조선로동당 중앙위원회 2013년 3월 전원회의에서 하신 보고," Uriminzokkiri, March 31, 2013,

<http://www.uriminzokkiri.com/index.php?ptype=great&subtype=rozak&no=3905>.

¹⁷ "조선외무성 핵선제타격권리 행사하게 될것이다," *KCNA Watch*, March 7, 2013, <https://bit.ly/2mHmtSR>.

¹⁸ "조선인민군 총참모부 대변인성명, 《을지 프리덤 가디언》 합동군사연습에 대한 원칙적립장 천명," 조선신보, August 22, 2016, http://chosonsinbo.com/2016/08/kcna_160822/.

¹⁹ Bonnie Berkowitz, Laris Karklis, and Tim Meko, "North Korean Nuclear Missile Targets in the U.S.: Where Might They Strike? - Washington Post," *The Washington Post*, July 25, 2017, https://www.washingtonpost.com/graphics/world/north-korea-targets/?utm_term=.cad48decefe2.

²⁰ Sagan, *Moving Targets*.

Evolution of the DPRK's nuclear doctrine

Deterrence

Prior to the first nuclear test in October 2006, the DPRK's Ministry of Foreign Affairs issued a statement²¹ that it would conduct a nuclear test in a safe manner, committing to nonproliferation measures and global disarmament efforts, and affirming its 'No First Use' policy. The statement emphasized that the role of nuclear weapon is merely to deter external aggression and resembles Pakistan's official statement after its first nuclear test in 1998. Pakistan also echoed its commitment to nonproliferation and global disarmament as well as affirming its 'No First Use' policy.²² Thus, DPRK's initial nuclear doctrine was defensive.

Massive retaliation

The DPRK's nuclear doctrine began to shift in 2013, shortly after Kim Jong Un came to power. To start, the nuclear weapon state law²³ noted the idea of massive retaliation to deter and repel adversarial invasion. Contrary to the statement made after its first nuclear test in 2006, the law specified the means of deterrence as massive retaliation (Article II) and second-strike capability (Article III).

The doctrine of massive retaliation declared in 2013 preceded a massive production of nuclear warheads as well as a technical capability of warhead miniaturization and stable delivery system with diverse ranges – a requirement for nuclear weapons use in battlefield. The US SIOP-62 (Single Integrated Operation Plan) produced in 1960 and 1961 indicated that the massive retaliation option against the Communist adversaries would require “the entire force of 3,267 nuclear weapons.”²⁴ With a small number of nuclear warheads with estimates ranging from 20 to 60,²⁵ the DPRK's doctrine of massive retaliation cannot be implemented successfully. It was not until 2017, when the DPRK's first intercontinental ballistic missile (ICBM) missile began, that US intelligence assessed that the DPRK had achieved missile-ready nuclear weapons.²⁶ Therefore, the early declaration of a doctrine of massive retaliation was not credible.

The origin of massive retaliation began with Secretary of State John Foster Dulles in 1954 to deter “any communist-inspired aggression.”²⁷ Freedman notes that the change in the US

²¹ “북한 외무성 핵실험 발표 성명 전문,” 한겨레, October 4, 2006,

<http://www.hani.co.kr/arti/politics/defense/162108.html>.

²² John Ward Anderson; Kamran Khan, “PAKISTAN SETS OFF NUCLEAR BLASTS,” *Washington Post*, May 29, 1998, <https://www.washingtonpost.com/archive/politics/1998/05/29/pakistan-sets-off-nuclear-blasts/be94cba3-7ffc-4ecc-9f67-ac6ddfe2a94c/>.

²³ “〈최고인민회의〉자위적핵보유국의 지위를 공고히 할데 대한 법 채택.”

²⁴ Sagan, *Moving Targets*.

²⁵ Hans Kristensen and Robert Norris, “North Korean Nuclear Capabilities, 2018,” *Bulletin of the Atomic Scientists* 74, no. 1 (January 8, 2018), <https://www.tandfonline.com/doi/full/10.1080/00963402.2017.1413062>.

²⁶ Joby Warrick, Ellen Nakashima, and Anna Fifield, “North Korea Now Making Missile-Ready Nuclear Weapons, U.S. Analysts Say - The Washington Post,” *Washington Post*, August 8, 2017, https://www.washingtonpost.com/world/national-security/north-korea-now-making-missile-ready-nuclear-weapons-us-analysts-say/2017/08/08/e14b882a-7b6b-11e7-9d08-b79f191668ed_story.html.

²⁷ Freedman, *The Evolution of Nuclear Strategy*.

nuclear posture from atomic monopoly to massive retaliation stems from a change in perception that the diverse range of nuclear capabilities readily available at the time could serve military purposes as much as conventional weapons. It is notable that the DPRK's doctrine shift preceded technical capability, while the US doctrine shift came after achieving technical capability.

Preemptive strike

Public statements²⁸ in 2013 started to indicate the DPRK nuclear force's war-waging strategy and preemptive nuclear strike capabilities, including target lists for strategic forces. A frequent reference to preemptive nuclear strike deserves close examination, since that posture requires "a reliable intelligence system to ensure adequate warning of attack, and an ability, including a capacity for quick movement, to abort this attack."²⁹ It is uncertain whether the DPRK had such a system and capability in 2013. Therefore, the credibility of preemptive strike doctrine is shattered with unproven capabilities.

The DPRK currently maintains that the role of its nuclear weapons program is to deter and repel threats to its supreme national interest, however, the rhetoric plus fissile material production and missile development indicate that DPRK may move toward the early French or Pakistani doctrine of incorporating local nuclear forces as a main pillar of its strategy. There is no solid evidence that the DPRK has obtained technical capability for a war-waging strategy or a preemptive nuclear strike, however the doctrine has been consistent since 2013.

No First Use Policy

The credibility of the DPRK's declaratory 'No First Use' policy is low. First, the "DPRK Law on Consolidating the Position of Nuclear Weapons State for Self-Defense" does not preclude use of nuclear weapons against a non-nuclear weapon state when that state attacks the DPRK. For example, an ROK conventional attack against the DPRK may be met with the DPRK's nuclear forces and directly contradicts to the notion of 'No First Use.' In addition, the DPRK's repeated references to nuclear preemptive strike reduces the credibility of its 'No First Use' Policy.

Making credible threats with insufficient means

A recurring theme in the DPRK's nuclear doctrine is the discrepancy between declared doctrine and actual capability to implement it. The DPRK has often put forward a rhetorical proposition while its ability to implement such a plan is in development. Notably, the DPRK's Strategic Forces Strike Plan with targets in US mainland released in 2013 preceded the first ICBM test in 2017. And, North Korea's ICBM's re-entry vehicle capability has not yet been proven. Regardless, the DPRK has released its nuclear target list. Another example is the reference to preemptive strike without having a proper early-warning system and a launch-on-warning capability. In the aftermath of the false incoming missile alarm in Hawaii, Scott Sagan noted

²⁸ "조선인민군 총참모부 대변인성명, 《을지 프리덤 가디언》합동군사연습에 대한 원칙적립장 천명"; Berkowitz, Karklis, and Meko, "North Korean Nuclear Missile Targets in the U.S.: Where Might They Strike? - Washington Post."

²⁹ Freedman, *The Evolution of Nuclear Strategy*.

that a false alarm in the DPRK would have caused unintended consequences as the DPRK lacks “the multiple and independent satellite-based warning systems that create redundancy and reliability.”³⁰

Therefore, a major dilemma for the DPRK’s nuclear doctrine is to make its threat credible while its capabilities are not yet complete. The DPRK cannot continue to announce declaratory policies without proper capabilities because states “care more about what an adversary does with nuclear weapons than what it says about them.”³¹ Existing literature on nuclear deterrence cannot explain how the DPRK could successfully exercise its nuclear deterrence because the acquisition of necessary capabilities is presupposed. Thomas Schelling offered the “risks of accidental or inadvertent escalation to nuclear war”³² as the key to the credibility problem. However, Schelling’s framework does not apply to DPRK in the absence of proven capabilities. The other explanatory framework is brinkmanship, often attributed to the DPRK as a diplomatic tactic. Robert Powell analyzed that brinkmanship is “a confrontation between the United States and a small nuclear state”³³ and concluded that the US is likely to be deterred from overthrowing the regimes because small nuclear states’ stakes are much higher than that of the US. While brinkmanship theory successfully explains the DPRK’s provocative behavior, it cannot explain why the US is deterred when small nuclear state’s capability is not yet proven.

The credibility of the DPRK’s nuclear deterrence lies in “threats that leave something to chance”³⁴ as Schelling put it, albeit in a different context. In the case of DPRK, “something to chance” refers to the likelihood of the DPRK being capable of delivering its nuclear arsenal to its targets. In other words, it is the uncertainty whether DPRK can deliver nuclear warheads to the US mainland. Policymakers and military planners, unlike academics, cannot allow any possibility that the DPRK’s nuclear warheads will hit San Francisco or Washington DC. The unknown likelihood of DPRK’s nuclear retaliation is the source of the “delicate balance of terror.”

The examination of the sources of credibility of the DPRK’s nuclear deterrence raises fundamental question about existing theories of nuclear deterrence. While many scholars and strategists have worked to identify “how much is enough” for deterrence, few have attempted to examine the minimum requirement for nuclear deterrence in the absence of necessary capabilities. Therefore, the credibility of the DPRK’s nuclear deterrence offers an interesting challenge to theories of nuclear deterrence.³⁵

³⁰ Scott D. Sagan, “Armed and Dangerous,” *Foreign Affairs*, January 29, 2019,

<https://www.foreignaffairs.com/articles/north-korea/2018-10-15/armed-and-dangerous>.

³¹ Vipin Narang, “Posturing for Peace? Pakistan’s Nuclear Postures and South Asian Stability,” *International Security* 34, no. 3 (January 7, 2010): 38–78.

³² Thomas C. Schelling, *Arms and Influence* (Yale University Press, 2008).

³³ Robert Powell, “Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense,” *International Security* 27, no. 4 (2003): 86–118.

³⁴ Thomas C. Schelling, *The Strategy of Conflict* (Harvard University Press, 1980).

³⁵ On DPRK’s theoretical contribution to the acquisition of nuclear weapon, see Nicholas Miller and Vipin Narang, “North Korea Defied the Theoretical Odds: What Can We Learn from Its Successful Nuclearization?,” *Texas National Security Review* 1 (February 13, 2018), <https://tnsr.org/2018/02/north-korea-defied-theoretical-odds-can-learn-successful-nuclearization/>.

Conclusion

This paper has attempted to systematically answer a question that has often been raised by national security establishment – what is the DPRK’s nuclear doctrine? The findings offer both theoretical and policy implications. First, the findings suggest that the DPRK’s nuclear posture has evolved toward a more aggressive posture, despite popular misperception that the role of nuclear weapon in DPRK is purely for deterrence. The evolution of its doctrine toward preemptive strike indicates that premature redeployment of US tactical nuclear weapons into Korean theater, an argument with increasing popularity in Seoul, would only exacerbate the DPRK’s aggressive posture with marginal benefit for extended deterrence.

Second, the DPRK has adopted a posture that is common among weaker nuclear weapon states, as France at its early stage and Pakistan did to counter stronger adversaries. Existing theories on brinkmanship and resolve offer a logic to the DPRK’s nuclear posture, which is similar to other weaker nuclear weapon states. Third, the case of the DPRK’s nuclear doctrine poses a fundamental question for existing theories of nuclear deterrence – how little is enough to credibly threaten nuclear retaliation in the absence of necessary capabilities? More work can be done to explain the DPRK’s behavior, which can be summarized as credibly threatening nuclear retaliation when such capabilities are incomplete.

Further research should systematically study what triggers the evolution of nuclear doctrine. Freedman offered an excellent summary of the evolution of US nuclear strategy, and Narang published a foundational work on how regional powers optimize their postures. However, less has been done to explain what causes the evolution of nuclear doctrine. Such work would advance the literature on nuclear strategy and contribute to preventing nuclear war.

ABOUT THE AUTHOR

Dong-hyeon Kim (donghyeon@pacforum.org, dh_kim@mit.edu) is a current resident Kelly fellow and former nonresident Korea Foundation fellow at Pacific Forum. Dong-hyeon's research explores how the DPRK establishes and develops its nuclear doctrine over time, and more broadly what triggers the evolution of nuclear strategy among different nuclear weapon states. He received his MA in Law and Diplomacy from Tufts' Fletcher School, and BA in English Literature from Korea University. Previously he worked as a coordinator for the Korea Project at Harvard's Belfer Center, and as a Boston Correspondent of JoongAng Media Group interviewing scholars and practitioners on evolving issues of the Korean Peninsula. He served in the Republic of Korea (ROK) Army as a translator in G5 Future Operations, 2nd Infantry Division, United States Forces Korea and worked at the President's Office of the ROK.