

NORTH KOREAN DENUCLEARIZATION:
GETTING IT RIGHT

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Abstract

Since the aftermath of the Korean War, the Democratic People's Republic of Korea (DPRK or North Korea) has pursued a policy of nuclear and military development in order to protect itself from the threat of foreign intervention, namely the United States and its allies. Under Kim Jong-il's rule, the DPRK signed the non-proliferation treaty (NPT) and worked towards denuclearization with the Six Party Talks; however, efforts halted as the DPRK left the NPT and withdrew from these talks. The situation has only escalated under the rule of his son, Kim Jong-un, as the DPRK has gotten ever closer to a fully-functioning nuclear weapon that could be transported through an ICBM. While the United States sought to deter North Korea's nuclear development through the traditional theory of deterrence, it is evident that this approach has not been effective. While international efforts towards the denuclearization of the DPRK continue, it is important to understand the factors that have led to the re-invigorated desire for nuclear weapons capability and reasons for why denuclearization and deterrence continue to fail spectacularly. It is only by understanding that nuclear weapons in and of themselves do not work as effective coercive diplomacy as it had during the Cold War and the motivations of international actors as well as the DPRK that the international community could approach this issue more effectively.

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Introduction

The policy discussion concerning the United States and the Democratic People's Republic of Korea (DPRK or North Korea) has yet to provide a panacea for the North Korean nuclear crisis. Designing solutions for coping with the North Korean nuclear crisis that would reduce the risk of war on the Korean peninsula requires examining the deterrence strategies used, particularly when the United States and North Korea were exchanging threats of war up until 2017. By thoroughly analyzing what has unfolded between these nations over the past decade, we can better understand how deterrence holds on both sides—in the United States and in North Korea—and why the Korean peninsula is actually stable, even though the DPRK may be extremely close to being armed with nuclear weapons.

The two Koreas on the peninsula are still at war. The Korean War, which began in 1950, has never formally ended. The Korean Armistice Agreement, signed in 1953, halted the war, but the peace treaty to officially end the war has yet to be signed by both parties.¹ For more than six decades, the two nations—North Korea and the United States— have maintained their deterrence postures, specifically by leveraging brinkmanship strategies such as the exchange of constant threats. The brinkmanship strategy is likened to a game of chicken. In this scenario, two cars face each other and drive toward each other on a collision course. Each driver hopes the other will swerve. Yet if neither swerves, because each driver fears being labeled a “chicken,” they will collide and the result will be disastrous. Similarly, the United States and the DPRK

¹ Waxman, Olivia. “Why North Korea and South Korea Are Still Technically at War.” Time. Apr. 26, 2018. Retrieved from <http://time.com/5253054/north-korea-south-korea-war-history/>

seemed to be trying to drive each other to the verge, each side risking a nuclear war for itself.

The year 2017, in particular, was marked by the DPRK's constant missile tests and President Trump and Kim Jong-un's bloody war of words. Their adoption of nuclear brinkmanship strategies nearly resulted in pushing each other to the edge of the pit of raining "fire and fury." Military options were even discussed at one point. In this time of mutual vulnerability, North Korea adopted a posture of asymmetric escalation, which involved responding to the entire spectrum of intensity of armed conflicts with the threat of nuclear weapon deployment.² President Trump, meanwhile, maintained that "all options are on the table," triggering an ongoing debate in the United States concerning the possibility of a bloody nose first strike on North Korea. Former National Security Advisor H.R. McMaster once held to the "least bad option" of a preventive or first strike by the United States against North Korea to solve the crisis, failing to recognize that a "limited strike" would not stay limited.³ In *North Korea's ICBM: A New Missile and a New Era*, Ankit Panda and Vipin Narang maintain that this approach would "guarantee a nuclear war."⁴ Similarly, Victor Cha and Katrin Fraser Katz, in *The Right Way to Coerce North Korea*, and Scott Sagan, in *The Korean Missile Crisis*, emphasize that a preemptive strike is a dangerous move that not only risks the lives of South Koreans and Japanese but those of Americans as well.

² Narang, Vipin. "What Does It Take to Deter? Regional Power Nuclear Postures and International Conflict." *Journal of Conflict Resolution*, vol. 57, no. 3, Sept. 2012, pp. 478–508

³ Rapp-Hooper, Mira. "The Cataclysm That Would Follow a 'Bloody Nose' Strike in North Korea." *The Atlantic*, Atlantic Media Company, 31 Jan. 2018

⁴ Panda, Ankit, and Vipin Narang. "North Korea's ICBM: A New Missile and a New Era." *War on the Rocks*, 6 July 2017.

There were so many risky moments of hostility taken nearly to the edge that preemptive strikes were often discussed as a means of solving the problem. If the situation had escalated a bit further and misperceptions or miscommunications between the United States and North Korea had developed, a nuclear war would have been a likely outcome. Ultimately, however, a Korean war did not break out again, and a nuclear WWII on the Korean peninsula did not materialize. Both nations understood each other's threshold, or at least some advisors for both nations' leaders were able to convince the leaders that military options were not worthwhile. Though they have actively employed the brinkmanship strategy throughout the years, driving toward each other without swerving, neither President Trump nor Kim Jong-un has carried out a preemptive strike.

That 66 years have passed without a nuclear war may demonstrate that deterrence does hold on both sides, North Korea and South Korea (under the U.S. umbrella). It could even be argued that the Korean peninsula is actually stable. The United States and North Korea both understand the costs of a nuclear war well enough to refrain from attacking each other. Rather than striving to win a nuclear war, which would be impossible, they both decided to keep the status quo in that they refrained from starting a nuclear war on the Korean peninsula. They also realized that they would not abruptly initiate a war in the absence of sufficient reason for doing so. The deterrence theory was effective, even for the most recent and most extreme conflicts between Kim Jong-un and President Trump. Some may point to the "madman theory," which describes leaders making reckless decisions. However, although Kim Jong-un and President Trump often make reckless policy decisions and display unorthodox behaviors, they are not necessarily irrational.

Brutality is not equivalent to irrationality. Both leaders are, at the least, rational enough to understand the consequences of a nuclear war. Thus, the notion of deterrence as a source of both threat and peace is evident in the cases of North Korea and the United States.

Nevertheless, traditional notions of deterrence fail when considering the long and storied history of North Korea's nuclear weapons development. Despite the strength and tenacity of the U.S. military power and projection in Northeast Asia, the DPRK under Kim Jong-un has not only failed to denuclearize but has indeed doubled its efforts to create a fully functioning nuclear weapon. Even after the summit between Kim and Trump, North Korea maintains its nuclear weapons development, as the most recent testing of an undisclosed weapon was announced by the state. The approach towards North Korea may be informed by other precedents in the history of nuclear proliferation and disarmament. Following the fall of the Soviet Union, countries that inherited nuclear stockpiles from the USSR(Union of Soviet Socialist Republics), including Belarus and Ukraine, willingly or under international pressure gave up some of the largest stockpiles of nuclear weapons in the world and joined the Non-Proliferation Treaty (NPT), aimed at reducing the number of nuclear weapons in the world. Other countries, for their own reasons, dismantled their actual nuclear stockpiles, as in the case of South Africa, or relinquished their nuclear weapons program, as Libya did, to gain concessions from the international community, such as reducing economic sanctions placed against each respective country.

While such precedents may provide some hope for the denuclearization and disarmament of the DPRK, it is also important to note that many of these cases do not completely mirror the current situation in the DPRK. In the case of Ukraine, the nuclear

stockpiles were inherited from the USSR; moreover, the international consensus was that Ukraine did not have the know-how or capabilities to manage such stockpiles effectively, though recent scholarship suggests that Ukraine had better capabilities than previously believed.⁵ Nevertheless, Ukraine was provided with certain security assurances from Russia and the United States in exchange for giving up its nuclear arsenal and joining the NPT. With Libya, the state of nuclear weapons capability between Libya and the DPRK today is like night and day. Libya did not possess any actual nuclear weapons, although it was in the research and development process. However, in light of what happened to Iraq during the 2003 Iraq War and the continued sanctions levied against Libya, Muammar Qaddafi saw it in his best interests to cooperate with the West to end Libya's nuclear program. Such a decision was driven by an internal motivation to approach the United States in secret to begin negotiations. Perhaps international pressure in the form of international sanctions may have chipped away at the Libyan government and forced it to disavow nuclear weapons, but the decision came from within. While the weapons capabilities are significantly different between Libya and the DPRK, it is important to note that the DPRK's decision to dismantle its nuclear program and denuclearize will have to be an internal decision ultimately, much like in the Libyan case.

Perhaps the most congruent case to that of the DPRK may be South Africa's denuclearization in 1989. By the time of its disarmament, South Africa had six Hiroshima-type nuclear bombs, even if it did not have missile technology to deliver them

⁵ Budjeryn, Mariana. Ukraine and the Treaty on the Non-Proliferation of Nuclear Weapons. Wilson Center. October 15, 2018. Retrieved from <https://www.wilsoncenter.org/blog-post/ukraine-and-the-treaty-the-non-proliferation-nuclear-weapons>

over a long distance.⁶ Yet, much like Qaddafi's choice to disarm, South Africa's choice came from internal discussion and needs rather than solely on the influence of international actors. South Africa had already been dealing with international sanctions, in part because of its clandestine nuclear program but mostly due to the apartheid regime, which had been deemed racist and as a "crime against humanity" by the United Nations. Nevertheless, the decision for denuclearization came from the changing dynamics that led the South African government to deem nuclear weapons unnecessary for its national security interest. Prime among the change in dynamics was the fall of the Soviet Union. Without the threat to the South African regime from the international communist threat from the leftist governments in recently liberated Angola or the provision of independence to the formerly controlled region of Namibia, there was no need for nuclear weapons. Furthermore, for the South African government, its nuclear weapons were less for deterrence against the communist forces in Southern Africa and more a muted threat to the West and its former allies to come to South Africa's aid in times of need against the communist threat to prevent a nuclear war. Thus, in applying the lessons from South Africa, it is important to note that getting the DPRK to relinquish its nuclear weapons program requires understanding the DPRK's motivations for developing its nuclear weapons. By understanding such motivations and tackling these issues head on rather than just focusing on denuclearization directly would lead to a better result. Obviously the past and current approach in using deterrence and dealing with denuclearization without regard for the interests and needs of the DPRK has only led to impasse and stalemate.

⁶ Friedman, Uri. "Why One President Gave Up His Country's Nukes." *The Atlantic*. Sept. 9, 2017. Retrieved from <https://www.theatlantic.com/international/archive/2017/09/north-korea-south-africa/539265/>

But the motivations of the DPRK in pursuing a nuclear weapons program are not so straight forward. South Africa's motivations were multifaceted and dealt with a number of issues, including apartheid, international sanctions, internal conflict in the South African controlled area that was to become Namibia, and communist forces in Southern Africa. For North Korea, one of the major issues is also regime survival, much as it was for South Africa's need to repel the threat posed by communist forces. Yet, many of the cases in which denuclearization and disarmament has occurred has left the DPRK wary of such recourse. Qaddafi's decision to halt Libya's nuclear weapons program could be seen as a warning to the Kim regime of what could happen after the loss of its own nuclear weapons program. After relinquishing its program in 2003, in the face of internal rebellion, international forces composed of U.S. and European troops intervened within the internal turmoil of the country, resulting in the capture, humiliation, and death of Qaddafi in 2011. If Libya still maintained its nuclear program, it could have potentially developed nuclear weapons. Such technology could have caused the United States and its allies to reconsider such a drastic response. Disarmament in the past has not helped stabilize and secure the disarmed nations' sovereignty. Even in Ukraine, after giving up its nuclear arsenal, in 2014, Russia encroached upon Ukrainian territory of Crimea. Again, from the DPRK perspective, this result calls into question whether acquiescing to international pressures to denuclearize and dismantle its nuclear weapons would be the smartest choice. At best, it could open up and be accepted into the international community, like South Africa. At worst, it may just give the West and the perceived enemies of the DPRK a tool to weaken North Korea's security to depose the

regime, whether immediately as in the case of Iraq's Saddam Hussein or eventually as evidenced by Qaddafi's own demise.

The research and analysis provided by this paper shows that deterrence is a dated approach to the North Korean nuclear issue. The complexities of the DPRK's motivations for state survival, among others, suggest that rather than forcing denuclearization through coercive diplomacy, such as indicating the U.S. own nuclear capabilities, addressing the issues that make North Korea consider nuclear weapons necessary will be key in negotiating greater concessions from the DPRK. While many other precedents of denuclearization and disarmament provide lessons to apply to the North Korean situation, it is also important to understand the differences and limitations among them; that is, a one-size fits all approach does not work. For example, in effect, deterrence fails particularly because of the credibility of the threat. To successfully use deterrence as a means of coercive diplomacy, the threatened state must believe the threat from its adversary credible before capitulating to its demands. However, the United States' current track record is not good. Not only has it shown that it would invade or interfere in the affairs of countries that have disarmed or given up their program, any agreement on nuclear issues, such as that with Iran, may become null and void at the whim of the sitting president. Thus, the United States lacks credibility in this regard. Furthermore, if deterrence was going to make the DPRK capitulate, it would have done so long ago. Instead, the DPRK continues to violate United Nations Security Council (UNSC) resolutions banning it from certain activities, along with other bilateral sanctions levied against the country. No matter how many sanctions or condemnations placed upon the

DPRK and the Kim regime, tests of weapons technology, missile, and nuclear technology continued unabated.

Thus, this paper finds that deterrence has had little effect, if any, on preventing the DPRK from pursuing nuclear weapons development due to various factors, including the shifting perceptions of nuclear weapons and the interests and policies of major superpowers beyond the DPRK's control. This paper explores the existing research on deterrence and potential reasons for why deterrence may have failed in the North Korean case (Chapter 1). Then, it examines the history of nuclear development in North Korea and the failure to prevent further nuclear development in the country, presenting the case study of South Africa as a potential source for lessons learned and application to the North Korean case (Chapter 2). The next section delves into understanding the mechanisms for why denuclearization in the DPRK failed (Chapter 3). Finally, this paper provides a way forward in the approach to denuclearization policies in the future (Conclusion).

Chapter 1: History of Nuclear Development in North Korea

When the atomic bombs were detonated over the cities of Hiroshima and Nagasaki, bringing the Pacific theater of World War II to a close, the international community saw the devastation that could be wrought by nuclear weapons. But the existence of such power led to an arms race between the two superpowers following the war, the Soviet Union and the United States, adversaries in political ideology and world hegemony. Despite the power of these nuclear weapons and the tensions between the First World, allied with the United States, and the Second World, allied with the Soviet Union, nuclear weapons, while they existed in large stockpiles for both countries, were never used. In hindsight, these weapons created a situation where their existence led to a deterrence posture for both adversaries, allowing for relative stability. Thus, the fully-functional nuclear arsenal that Kim Jong-un hopes to develop poses greater assets than the absolute power that these nuclear weapons could unleash against enemies of the North Korean state. Much like the United States and the Soviet Union during the Cold War, the pure existence of a nuclear arsenal could provide the country with protections beyond the actual use of such weapons. The following literature review considers how nuclear weapons could be used as a form of deterrence against other countries, but also how it could prevent countries like the DPRK from developing its own nuclear arsenal. Moreover, other scholars of denuclearization and deterrence also consider how deterrence may have failed, especially given the mechanisms that allow deterrence to work in the first place.

I. Literature Review

Deterrence has been a hallmark of United States foreign policy for much of the Cold War, where for nearly half a century, the former Soviet Union and the United States clashed in ideological difference yet only reached the brink of war without any direct armed conflict. During the Cold War, U.S. deterrence focused on two specific missions: “deterrence of nuclear attack (by threatening swift, effective retaliation), and deterrence against overwhelming conventional attack against North Atlantic Treaty Organization (NATO) countries by the Warsaw Pact.”⁷ While this period was marked by a nuclear arms race that presented an imminent threat to both the United States and the Soviet Union, a nuclear holocaust resulting from a nuclear war never manifested, supporting the idea that deterrence was a source of both threat and peace. Although the Cold War may long be over, the United States still upholds the idea of nuclear deterrence in its strategic policy. However, its priorities have slightly shifted where its first mission of deterring nuclear attack has come to also include other weapons of mass destruction.⁸

As a mode of coercive diplomacy, deterrence uses the threat of force to compel an adversary to reconsider potential actions that where the benefits would no longer outweigh the costs. Thomas Schelling (1977) suggests that deterrence has brought about “relative international peace”—meaning the absence of nuclear detonations and, thus, nuclear war—in the midst of the nuclear standoff of the twentieth century. With the advent of nuclear weapons and increasingly destructive military technology, the potential for destruction now encompass the complete annihilation of humanity, not just cities or

⁷ Bailey, Kathleen C. et al. (2007) White Paper on the Necessity of the U.S. Nuclear Deterrent. Retrieved from <http://www.nipp.org/wp-content/uploads/2014/11/Deterrence-Paper-version-21.pdf>. Accessed Dec. 6, 2018.

⁸ Ibid.

nations. As a result, this effect provides the most powerful and absolute bargaining chip. “Victory is no longer a prerequisite for hurting the enemy”; the “diplomacy of violence” and the threat of its infliction through such weapons are more effective military strategies.⁹ In this view, the stakes are now very much different. With the potential for complete annihilation from the face of the earth, the use of nuclear weapons or the possibility of its use created a situation for higher stakes. It wasn’t the victor and the loser in the aftermath of such war, it would be victor and no one else, as nuclear weapons, seen in the wake of Hiroshima and Nagasaki, where nothing of the losers would remain. Yet because of its destructive capabilities not just set against a specific target, whether that be an individual, a city, or a state, but against all of humanity that allowed for nuclear deterrence to prevent a nuclear war. Again, the stakes were much higher when it came to the use of nuclear weapons. By studying the distinction between the use of force as either an act of detonation or a form of threat, we can begin to understand why the doctrine of mutually assured destruction (MAD) prevented nuclear war. Deterrence is most potent with the threat of use rather than the act itself. In the case of the latter, the adversary would then have nothing to lose. Thus, “violence is most purposeful and most successful when it is threatened and not used.”¹⁰ Nevertheless, this threat of use must be credible and clearly communicated to the adversary in order for deterrence to be effective. Without this prerequisite, the adversary would not understand what is at stake and therefore would probably not react the way that was intended by the nuclear power.

Yet, other scholars have criticized Schelling’s position that the threat of force and the potential for mutually assured destruction allows for greater stability and peace.

⁹ Schelling, T. C. (1977). *Arms and Influence* (pp. 31-34). New Haven and London: Yale University Press.

¹⁰ *Ibid.*

Robert Jervis (1989) questions whether the threat of nuclear war makes the world more secure. Jervis believes, as does Schelling, that “military victory is no longer possible in a war between the superpowers.”¹¹ During the Cold War, the nuclear arsenals of the United States and Russia did not differ substantially. As it stands today, the difference between the United States and Russia, the successor state of the Soviet Union, in terms of the size of their respective nuclear arsenals is not very large. However, both nuclear powers stand ahead of the next largest nuclear power, France with about 300 nuclear weapons, and China, with about 270. These arsenal pale in comparison to Russia’s approximately 6,800 and the U.S. 6,550.¹² Even today, both the United States and Russia stand head above water over the next largest nuclear power, France and China. However, the existence and capabilities of nuclear weapons pose a contradictory dichotomy between annihilation and peace. Jervis criticizes Schelling’s simplistic yes/no take on real-world application of the theory: states should not simply resort to threatening their adversaries with nuclear attack as a means of deterrence, for having “more nuclear capabilities” does little to influence the behavior of countries that already have nuclear technology.¹³ Looking at the state of international security, this largely seems to be the case. Going back to the idea of mutually assured destruction, having a few nuclear weapons versus one in the thousands does little to deter countries with nuclear capabilities. This comes about as having one nuclear weapon is strong enough for annihilation, where an arsenal would not be necessary. When it comes to dealing with the DPRK, this seems to be true. Even when

¹¹ Jervis, R. (1989). In *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (pp. 1–2). Ithaca and London: Cornell University Press.

¹² Macias, Amanda (2018). “There are about 14,500 nuclear weapons in the world. Here are the countries that have them.” CNBC. Retrieved from <https://www.cnbc.com/2018/03/16/list-of-countries-with-nuclear-weapons.html>. Accessed Dec. 6, 2018.

¹³ *Ibid*, 19-23.

the Trump administration antagonized North Korea for its latest nuclear tests and the further development of its nuclear program, Kim Jong-un did not kowtow in light of the large nuclear arsenal of the United States. Rather, he pushed Trump into escalating his war of words, even amounting to threatening the U.S. territory of Guam. For Jervis, deterrence theory has its limitations, as nuclear deterrence cannot in and of itself bring about world peace.

Moreover, the limitations of deterrence extend further beyond whether states possess nuclear weapons. The efficacy of nuclear capabilities as a deterrence depends on communication – whether the target of such policies understand the threat as such. Robert Jervis, Richard Lebow, and Janice Stein (1985) acknowledge the importance of making credible commitments. The mere possession of nuclear weapons and the ability to deploy them are not enough to be deterrents in and of themselves. For nuclear weapons to have effective results, there needs to be a credible policy, where it would make sense from the adversary's point of view that nuclear weapons use would be warranted. Expert on nuclear deterrence for the Submarine Industrial Base Council (SIBC), Frank Miller stipulates certain conditions that lead to a credible declaratory policy:

Nuclear responses are credible when linked directly to the defense of a nation's vital interests and territorial integrity and, where undergirded by treaties and decades of demonstrated commitment, to the defense of allies' vital interests and territorial integrity. A potential adversary who comes to believe that a deterrent has been linked to the defense of something which is not worth risking national survival through the military employment of nuclear weapons is likely to test that proposition.¹⁴

According to this idea, the adversary must believe that a country will be willing to use nuclear arms for that particular situation. With regard to the United States and North Korea, however, this credibility is called into question. It is obvious that the United States

¹⁴ Miller, Franklin C. (2016) *The Need for A Strong U.S. Nuclear Deterrent in the 21st Century*. Submarine Industrial Base Council.

can use overwhelming power against North Korea, a shock and awe tactic used against Iraq during the 2003 Iraq War. However, North Korea also calls into question the credibility of the United States to deploy such weapons, especially given the repercussions of such actions, vis-à-vis China and Russia, countries that closely border North Korea. Thus, the adversary, in this case North Korea, does not believe that the United States would be willing to use nuclear weapons against the country because of certain international norms and its hesitance to alter its relationships with both China and Russia. This may go as far to explain, at least partly, why deterrence has failed in preventing Kim Jong-un from dismantling North Korea's nuclear program.

Furthermore, while having a credible nuclear threat is important in deterrence, Jervis, Lebow, and Stein emphasize the difficulty of understanding and communicating signals: Distinctions that seem obvious to the sender might be confusing or opaque to the receiver. What's more, signals are sometimes incompletely received, particularly when sent during dramatic events and/or when its recipient fails to understand the context.¹⁵ Jervis (1988) notes in *War and Misperception* that "although war can occur even when both sides see each other accurately, misperception often plays a larger role. Particularly interesting are judgments and misjudgments of another state's intention."¹⁶ Even with the advancement in communication technology and openness of the Internet and information, such miscommunication is prevalent. One only needs to see the escalation of words between Kim and Trump to see how true this could be. While the joint United States and South Korean military drills held every year shows a clear message to North Korea, the escalation of such drills could be seen by the Kim regime as a greater than was initially

¹⁵ Jervis, R., Lebow, R. N., & Stein, J. G. (1985). *Psychology and Deterrence*. Baltimore and London: The Johns Hopkins University Press.

¹⁶ Jervis, Robert. "War and Misperception." *The Journal of Interdisciplinary History* 18(4) 1988: 675.

intended, creating a more tense situation that could lead to greater brinkmanship. On the other hand, the lack of assertive action against the DPRK given its violation of UN Security Council resolution might suggest that the international community may not actually be against its nuclear program, which may not be the actual case.

Miscommunication leads to undermining deterrence while it could also unnecessarily escalate tensions toward war. Thus, a deterrence strategy carries a possibility of failure just like any other foreign policy options, with misperceptions being a primary reason.

Yet, it is important to note that nuclear weapons as a tool of deterrence does not have a one size fits all effect. There are differing situations and thus differing degrees to which nuclear weapons could be used for deterrence. Taking a look at deterrence among nuclear powers, Vipin Narang (2012) challenges the notion of existential bias as in an era of regional nuclear powers, the “superpower deterrence equation is nearly irrelevant to all other nuclear powers.”¹⁷ In other words, the mere existence of nuclear weapons is no longer enough to prevent conflicts. Narang examines the experiences of nuclear states and analyzes their attitudes in regards to these capabilities, categorizing them into three categories: catalytic, assured retaliation, and asymmetric escalation. Among these options, asymmetric escalation is the most aggressive option where states are able to express the intention, along with the credible capability, to use nuclear weapons in a tactical setting on an adversary’s conventional forces. To achieve credibility, a nation must be transparent regarding its “capabilities, deployment patterns, and conditions of use.”¹⁸ Such an attitude defuses conflicts at both a low and high level of violence against both

¹⁷ Narang, Vipin. "What Does It Take to Deter? Regional Power Nuclear Postures and International Conflict." *Journal of Conflict Resolution* 57, no. 3 (2012): 95.

¹⁸ Ibid, p.479

nuclear and non-nuclear states. Thus, he concludes that nuclear weapons exert varying levels of deterrence according to a state's nuclear posture.

Moreover, even while nuclear weapons could compel restraint given the possibility of mutually assured destruction and complete annihilation, conventional weapons still create an environment of instability that could lead to the brink of nuclear war. Through examining conflicts armed with both nuclear and conventional weapons, Barry R. Posen (1992) challenges early limited war theorists by maintaining that large-scale conventional conflicts can “inadvertently” escalate to the point of nuclear war.¹⁹ In his view, intentional actions could unintentionally be escalatory in nature. Acknowledging that “no examples of such escalation” exist (as there have been no nuclear wars to date), he turns to the NATO–Warsaw Pact arms race of the 1980s, laying out possible scenarios that would have been ripe for nuclear escalation.²⁰ During much of the Cold War, escalation between the two global superpowers, the United States and the Soviet Union were in constant competition and conflict, even on the European continent. Those that allied themselves with the United States and sought protection under the U.S. nuclear umbrella were part of the North Atlantic Treaty Organization, NATO. In response, the Soviet Union created its own military alliance under the Warsaw Pact, where its satellite states were under its own nuclear umbrella. In effect, the tensions in Europe were constantly on high alert due to the proximity of the Soviet Union and the vigilance paid both to NATO and to the Warsaw Pact, especially with regards to the development of improved weapons. While he does explore this idea of intentional actions leading to unintentional escalation, Posen also considers incidental conventional attacks

¹⁹ Posen, Barry R. (1992). *Inadvertent Escalation: Conventional War and Nuclear Risks*. Cornell University Press., ix

²⁰ *Ibid.*, 4

on nuclear forces rather than accidental or deliberate attacks on nuclear weapons.²¹ Such an idea still remains a potent threat for the Soviet Union's successor state of Russia. According to Russia's 2010 Military Doctrine, "nuclear weapons will remain an important factor for preventing the outbreak of nuclear military conflicts and military conflicts involving the use of conventional means of attack (a large-scale war or regional war)."²² While there is retaliation for a potential nuclear attack, Russia's military strategy also considers where the use of nuclear weapons could arise from a threat initiated by conventional weapons. Therefore, it is significant in the study of denuclearization of the Korean peninsula to be aware that conventional weapons, used as intentional actions, could lead to a situation where nuclear weapons could be used as a tool.

Such escalation, Posen argues, arises from the security dilemma, the nature of military organizations, and the "fog of war." The security dilemma arises as states build up their arsenals and capabilities from the perception that their adversaries are doing so as well. This creates a situation that leads to the escalation of tensions due to an arms race. Any advancement in military or weapons technology inherently threatens the security of its adversary by the very fact that such technology could render the adversary's weapons obsolete or overpower the adversary's own forces. Thus, in such an event, an arms race ensues, and has so in the past during the Cold War as seen during the nuclear arms race between the United States and the Soviet Union. Today, this is all the more potent, as North Korea considers its own nuclear weapons programs as a necessity for the sake of its security against aggressors, including the United States. Moreover, military organizations tend to have a "proclivity for offensive operations," and they generally seek

²¹ Ibid., 2

²² *The Military Doctrine of the Russian Federation*. (2010) Russian Presidential Website. Retrieved from https://carnegieendowment.org/files/2010russia_military_doctrine.pdf. Accessed Dec. 9, 2018.

autonomy from outside interventions in military planning and execution, an orientation that can create an environment ripe for escalation. Third and last, Posen borrows Clausewitz's notion of the "fog of war" to explain the causes of inadvertent escalation, noting that difficulties encountered when gathering and seeking to interpret critical information during a conventional conflict may increase the possibility of inadvertent escalation.²³ This also relates back to the idea of perception and misperception detailed by Jervis.

With the use of conventional weapons in escalating conflicts, there is some doubt on the use of nuclear weapons as a method of coercion. Todd Sechser and Matthew Fuhrmann (2017) goes as far as challenging the notion of the "nuclear coercionist" school as professed by Schelling. They maintain that the coercive advantages gained from nuclear weapons are minimal, especially when given the analysis of 200 cases of militarized compellent threats made between 1918 to 2001.²⁴ Focusing on the 23 cases of military confrontations within seven different territorial disputes, Sechser and Fuhrmann conclude that in comparison to their non-nuclear counterparts, nuclear weapons do not have "additional compellent leverage beyond what is already afforded by their conventional capabilities."²⁵ Sechser and Fuhrmann recognize that nuclear weapons lack credibility due to the mutually destructive nature of the weapons once detonated while coercive diplomacy could be pursued through conventional weapons; thereby rendering nuclear weapons redundant.²⁶

²³ Ibid., 12-22

²⁴ Sechser, Todd S., and Matthew Fuhrmann. *Nuclear Weapons and Coercive Diplomacy*. Cambridge, United Kingdom: Cambridge University Press, 2017. 79-95.

²⁵ Ibid, p.95

²⁶ Ibid, pp.45-51

This notion that conventional weapons are just as effective as nuclear weapons in deterrence is echoed by Keir A. Lieber and Daryl G. Press (2017) who recognize the advent of a new era in which nuclear weapons are no longer the ultimate instrument of deterrence.²⁷ In addition to both strategic and tactical nuclear weapons, they contend that even conventional weapons can destroy most types of counterforce targets. For South Korea, this is true. While North Korea's potential nuclear weapons could wreak massive casualties and destruction to the ROK(Republic of Korea), the use of conventional weapons would just as easily deliver such a result. Moreover, the United States has the potential to destroy the DPRK, not with nuclear weapons, but by the simple use of conventional weapons given its bases located in the region (South Korea and Japan) as well as its fleet in the Pacific. In the past, as was shown with an inimical leader, the United States has shown that it could just as easily depose and undermine a country with incredible speed, seen in the 2003 Iraq War.

To survive in a world that is more vulnerable than ever before thanks to the technological advancement of highly accurate weapons, it is critical that nations improve their retaliatory arsenals to "thwart advanced sensor and strike systems."²⁸ Thus, according to Sechser and Fuhrmann, the main value of nuclear weapons lies in self-defense rather than coercion. This is made all too aware to the United States, as during the Obama administration, the Nuclear Posture Review of 2010 declared that nuclear weapons were mainly to deter nuclear attack against the United States while conventional weapons would be strengthened so that nuclear weapons would only be used as a self-defensive deterrence tool. Outlined in the 2010 NATO Strategic Concept, for NATO,

²⁷ Lieber, Keir A., and Daryl G. Press. "The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence." *International Security* 41, no. 4 (2017).

²⁸ *Ibid*, p.46

“deterrence, based on an appropriate mix of nuclear and conventional capabilities, remains a core element of our overall strategy... The circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote.”²⁹ Moreover, NATO Secretary-General Jens Stoltenberg affirmed that NATO’s nuclear strategy of being in a nuclear alliance was purely based on that of political deterrence rather than its use as a military option during the July 2016 NATO summit in Warsaw, Poland.³⁰

It is under such context that this paper analyzes the efficacy of deterrence as a tool to contain and control the nuclear development of the DPRK. During the Cold War era, the deterrence posture may have seemed effective in lowering the possibility for nuclear war, evidenced by the lack of such war. Nevertheless, nuclear deterrence still does carry a high risk of war when combined with the possibility of miscommunication and inadvertent escalation. Throughout the post-Cold War period, such tensions have waxed and waned on the Korean peninsula, with the recent escalations pointing to the inefficacy of the deterrence policies of the past. However, such escalations and brinkmanship may arise because of the lack of credibility given the mutually assured destruction as supported by Sechser and Fuhrmann, or the fact that conventional weapons have the exact same potency, which is a fact that the ROK understands at a deeper level, given the effect such weapons could have on the Seoul metropolitan area.

²⁹ Ifft, Edward. (2017). “A Challenge to Nuclear Deterrence.” *Arms Control Today*. Arms Control Association. Retrieved from <https://www.armscontrol.org/act/2017-03/features/challenge-nuclear-deterrence>

³⁰ Ibid.

II. The Beginnings of North Korea's Nuclear Ambitions

Nuclear ambitions in the DPRK began almost immediately after its inception. Following the devastating Korean War, which lasted between 1950 – 1953, pitting Koreans against each other in a proxy war between the Soviet Union, supporting the north, and the United States, backing the south. Understanding this dynamic, North Korean leader Kim Il Sung established the Atomic Energy Research Institute and the Academy of Sciences in 1952 to protect his new state from foreign forces, particularly the United States.³¹ However, North Korea's pursuit of knowledge concerning nuclear weapons found little traction until 1955, when members of the DPRK's Academy of Sciences attended a nuclear energy conference in Moscow. The following year, North Korea signed an agreement with the Soviet Union's Joint Institute for Nuclear Research, and North Korean scientists were soon sent to Soviet Union for training.³² In 1959, North Korea and Soviet Union agreed to establish a nuclear research center in the DPRK under the code name "The Furniture Factory." The research center was located only eight kilometers from Yongbyon, what was to become one of North Korea's major nuclear facilities. The construction of Yongbyon's "furniture factory" also included the installation of a Soviet IRT-2000 nuclear research reactor.³³ With the assistance of the Soviet Union, North Korea was able to jump-start its nuclear weapons program to secure the regime by countering other nations, especially the United States.

The major expansion of North Korea's nuclear program came in the 1980s. From 1984 to 1986, Pyongyang built a gas-cooled, graphite-moderated nuclear reactor for

³¹ "North Korea: History." *Nuclear Threat Initiative - Ten Years of Building a Safer World*, NTI , www.nti.org/learn/countries/north-korea/nuclear/.

³² Clemens Jr., Walter C. "North Korea's Quest for Nuclear Weapons: New Historical Evidence" 2010.

³³ "North Korea: History."

plutonium production. More reactors and a reprocessing plant followed during the latter part of the 1980s. On the international front, North Korea signed the Treaty on the Nonproliferation of Nuclear Weapons (NPT) in 1985 under the agreement that the Soviet Union would construct a light-water reactor (LWR) capable of generating 1,760 megawatts of electricity.³⁴ However, North Korea withdrew from the treaty in 2003, reversing its former policies as it went on to conduct underground nuclear testing that started in 2006 and continued through 2017.³⁵

North Korea began to see nuclear weapons as a means of security assurance in the 1950s, and the collapse of the USSR only served to strengthen North Korea's nuclear ambitions. Initially with the assistance from the Soviet Union, North Korea began to develop the scientific know-how in nuclear technology necessary to protect itself from foreign threats, primarily the United States during the Cold War. The necessity of securing itself through nuclear technology was only further entrenched with the collapse of the Soviet Union in 1991. As one of the few allies of the DPRK, the dissolution of Soviet Union and the end of communist rule in that nation alarmed North Korea. Surely the DPRK had to remain vigilant if a large and powerful country such as the Soviet Union could succumb to the pressures of the West, particularly the United States. Since that time, North Korea has further perceived the necessity to pursue its own protection to maintain the regime, particularly as North Korea has become a "shrimp" between another pair of global powers, China and the United States.

³⁴ Hassig, Ralph C., and Kongdan Oh. "North Korea: A Rogue State Outside the NPT Fold." *Brookings*, 1 Mar. 2005, www.brookings.edu/articles/north-korea-a-rogue-state-outside-the-npt-fold/.

³⁵ "North Korea's Nuclear Program ." *American Security Project*, Aug. 2012.

III. Current Nuclear Capabilities

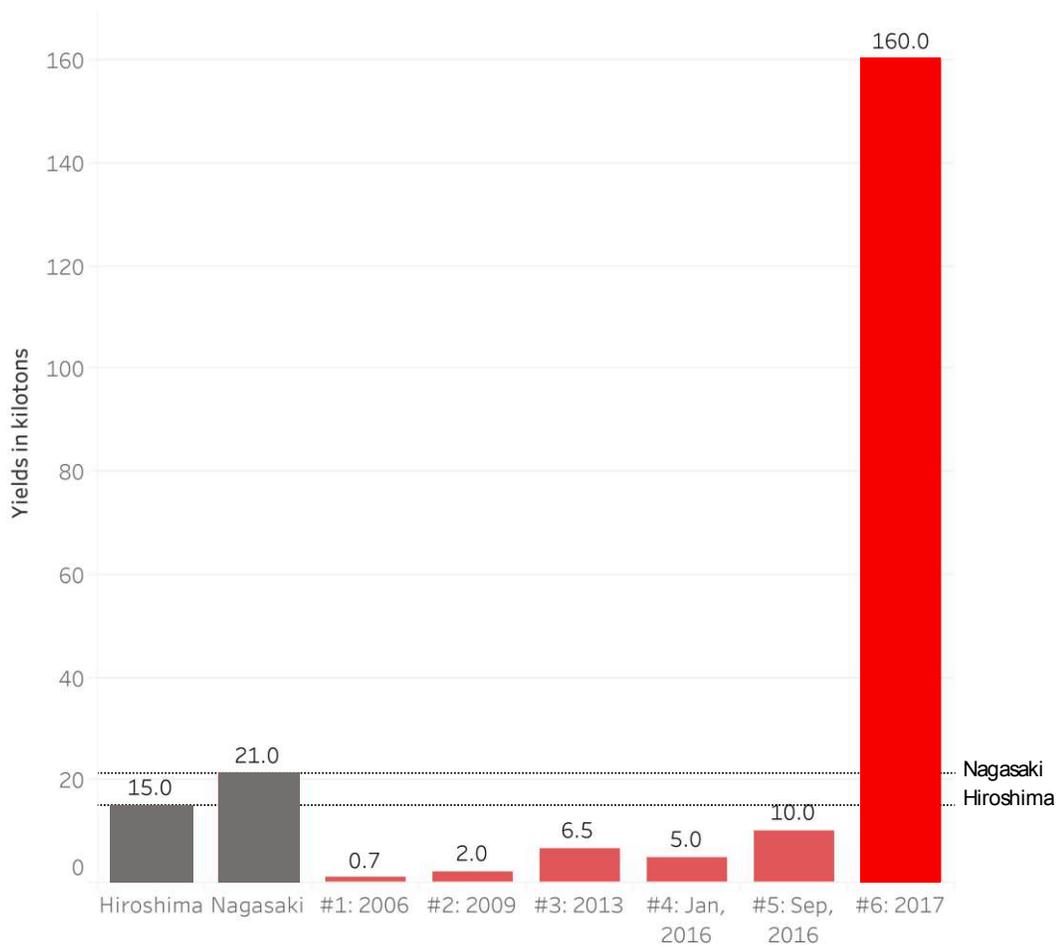
The era of nuclear development in North Korea entered a new phase as Kim Jong-un came into power in 2011 after the death of his father, Kim Jong-il. Kim Jong-un's long-held ambitions for the DPRK's nuclear expansion ultimately led the country to last year's successful test of an ICBM that could reach the U.S. mainland, and North Korea is now probably only "a few tests away" from being completely capable of launching such a missile. Moreover, the year 2017, in particular, was marked by the DPRK's constant missile tests and President Trump and Kim Jong-un's bloody war of words. Their adoption of nuclear brinkmanship strategies nearly resulted in their pushing each other to the edge of the pit of raining "fire and fury." Military options were even discussed at one point. In this time of mutual vulnerability, North Korea adopted a posture of asymmetric escalation, which involved responding to the entire spectrum of intensity of armed conflicts with the threat of nuclear weapon deployment.³⁶

However, an inescapable uncertainty clouds any discussion of North Korea's progress toward developing truly deployable WMDs. Because of the closed-off nature of North Korean society, an accurate assessment of Pyongyang's present capabilities is a nigh-impossible task. Accordingly, the outside world must base its knowledge on scraps of information gleaned from North Korean domestic news reports—the reliability of which is unknown, and which often report evident test failures as unverifiable successes when conducted underground. However, another method exists by which other nations could at least measure the breadth of the North Korean nuclear test explosions and estimate that country's current nuclear capability: seismic monitoring to measure explosive yields from

³⁶ Narang, Vipin. "What Does It Take to Deter? Regional Power Nuclear Postures and International Conflict." *Journal of Conflict Resolution*, vol. 57, no. 3, Sept. 2012, pp. 478–508

the tests. As indicated in Table 1, the estimated yields from the most recent DPRK tests have grown exponentially from those produced by its first attempt.

Table 1: North Korean Nuclear Test Yields Comparison



According to the articles published by CNN and Washington Post, the estimated yield for the DPRK’s sixth nuclear test was approximately more than ten times the level of Hiroshima bombing in 1945.³⁷ Although many experts dismiss North Korea’s claims of being able to test a hydrogen bomb, the DPRK’s latest nuclear detonation was undoubtedly its strongest so far, constituting an unmistakable warning of North Korea’s

³⁷ Sterling, Joe, Taehoon Lee, Stella Ko, and Steve Almasy. “North Korea Official: Trump on Suicide Mission. Trump Tweets Response.” *CNN*. 2017. <http://www.cnn.com/2017/09/23/asia/north-korea-seismic-activity/index.html>.

progress in creating nuclear technology.³⁸ Even in the midst of the DPRK's constant ballistic missile tests, little means exists by which to accurately verify that country's claim of being able to produce miniaturized nuclear warheads that are possessed of reentry capabilities. However, even amid this uncertainty, we cannot ignore North Korea's potential for mass destruction. Numerous news media outlets and experts on North Korea have speculated that North Korea still has not perfectly produced functioning nuclear warheads and ballistic missile technology, but even so, the DPRK is apparently progressing toward its goal of using rocket technology to deliver WMDs. There is considerable concern resulting from North Korea's progress, where UN Security Council sanctions and unilateral sanctions imposed by several countries have been futile in deterring Kim Jong-un from continuing his progress on creating a fully-functional and deliverable nuclear weapon.

The plausible window for denial has long since passed: Pyongyang is no longer far removed from perfecting its nuclear capabilities. Accordingly, an in-depth analysis of the factors that have contributed to the North Korean nuclear impasse can provide information crucial for addressing and solving one of the 21st century's gravest existential threats to peace and security. In short, if the regime were to launch an actual nuclear missile, the consequences of doing so would be extremely destructive, even more so than the Hiroshima and Nagasaki bombing by the United States in 1945. The DPRK has long striven to develop its own nuclear weapons, and thus has invested an astronomical volume of resources into developing this capability. In particular, Kim

³⁸ Lee, Michelle. "North Korea Nuclear Test May Have Been Twice as Strong as First Thought." *The Washington Post*. 2017. https://www.washingtonpost.com/world/north-korea-nuclear-test-maybe-have-been-twice-as-strong-as-first-thought/2017/09/13/19b026d8-985b-11e7-a527-3573bd073e02_story.html?utm_term=.82a4706597d9.

Jong-un has firmly held to a belief that nuclear weapons were the ultimate measure that ensures the survival of his regime, —and thus his survival—once even proclaiming publicly on state media that the weapons are a “powerful deterrent that guarantees its sovereignty.”³⁹

However, important in the analysis of the DPRK’s nuclear program is its conventional capabilities developing alongside its nuclear weapons technology. This is no surprise given the central role the military plays within the state and its military-first policy known as Songun Chongch’i. As a result, the DPRK’s military has taken precedence, where the Korean People’s Army (KPA) is a top priority in any state decisions, whether domestic or international. Moreover, much of the population is involved in some form or another with the military. Although the population of the United States is 13 times larger than that of North Korea, the latter’s total military personnel more than triples that of the States (Table 2.2). Men in North Korea are universally conscripted, while women undergo a selective conscription process. The usual length of service is around 10 years, starting at the age of 17.

While the DPRK may have more military personnel and a force peopled through compulsory universal male conscription, the country largely lacks the resources of the United States. In short, its numbers do not equate to the military capability. For example, the United States has 13 times as many military aircrafts as North Korea. Furthermore, while the former does have a greater number of naval assets, however, with 967 against the U.S. 415, it lacks the presence, or otherwise, of an aircraft carrier. Aircraft carriers function as seagoing airbases, which usually measure from 500 to 1000 ft long. The

³⁹ Pearson, James. "Kim Jong Un Praises Nuclear Program, Promotes Sister." Reuters. October 09, 2017. <https://www.reuters.com/article/us-northkorea-missiles-kim/kim-jong-un-praises-nuclear-program-promotes-sister-idUSKBN1CD03V>.

aircraft carrier “remains a nation’s ‘symbol of strength’ and the U.S. Navy remains the clear leader in the field with its powerful nuclear-fueled fleet as well as its conventional-powered inventory.”⁴⁰ Moreover, North Korea’s military capability is largely limited, particularly because of its antiquated equipment. The Congressional Research Service report, published in November 2017, maintains that although North Korea is “the fourth-largest military in the world, it has some significant deficiencies particularly with respect to training and aging (if not archaic) equipment.”⁴¹

Table 2.1: Military Capability Comparison: North Korea and the United States⁴²

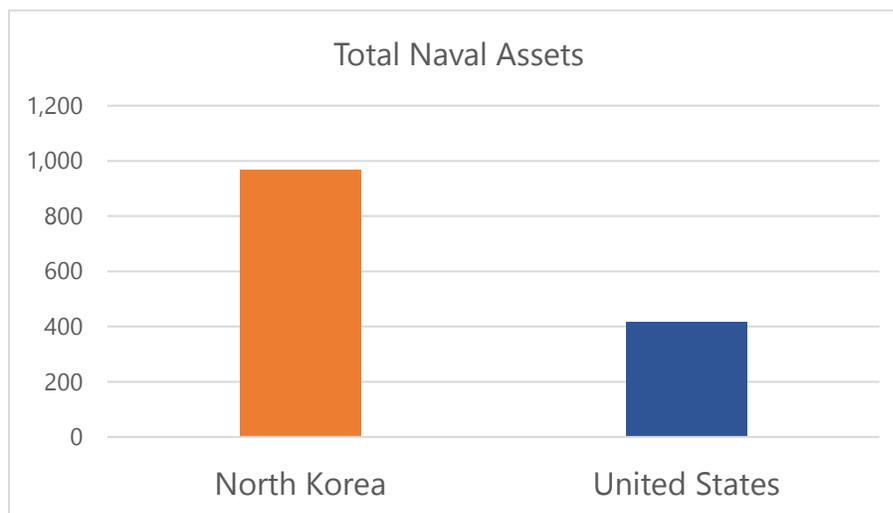
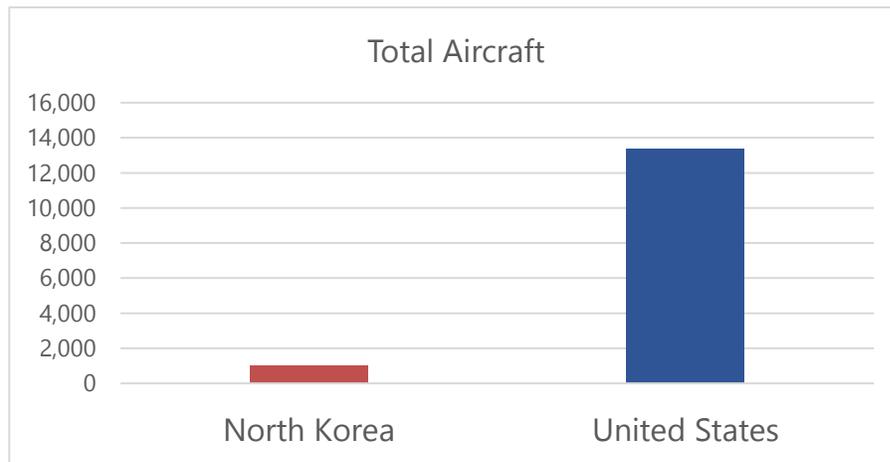
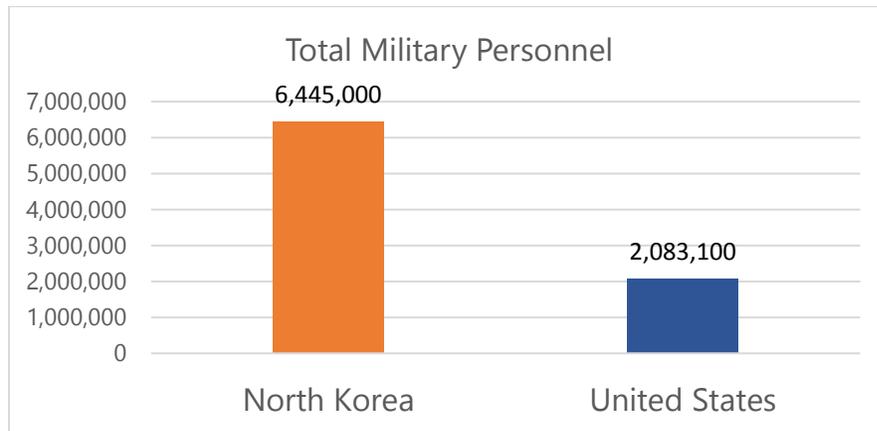
	North Korea	United States
GFP Rank (of 136)	18	1
Total Population	25,248,140	326,625,791
Manpower Available	13,000,000	145,215,000
Fit-for-Service	10,100,000	120,025,000
Reaching Military Age	415,000	4,220,000
Active Personnel	945,000	1,281,900
Reserve Components	5,500,000	801,200
Total Military Personnel	6,445,000	2,083,100
Defense Budget (USD)	\$7,500,000,000	\$647,000,000,000
External Debt (USD)	\$5,000,000,000	\$17,910,000,000,000
Foreign Reserve (USD)	\$6,000,000,000	\$117,300,000,000
Purchasing Power (USD)	\$40,000,000,000	\$19,360,000,000,000
Total Aircraft	994	13,362
Fighters / Interceptors	458	1,962
Attack Aircraft	516	2,830
Transports	119	5,248
Trainers	169	2,856
Helicopters	202	5,758
Attack Helicopters	20	973
Serviceable Airports	82	13,513
Tank Strength	5,243	5,884
Armored Fighting Vehicles	9,935	38,822
Self-Propelled Artillery	2,250	950
Towed Artillery	4,300	795
Rocket Projectors	5,000	1,197
Total Naval Assets	967	415
Aircraft Carriers	0	20
Submarines	86	66
Frigates	10	10
Destroyers	0	65
Corvettes	2	0
Patrol Craft	438	13
Mine Warfare Craft	25	11
Merchant Marine Strength	248	3,611
Major Ports & Terminals	8	24
Labor Force Strength	14,000,000	160,400,000
Oil Production (bbl/dy)	0	8,853,000
Oil Consumption (bbl/dy)	15,000	19,000,000
Proven Oil Reserves (bbl)	0	36,520,000,000
Roadway Coverage (km)	25,554	6,586,610
Railway Coverage (km)	5,242	224,792
Waterway Coverage (km)	2,250	41,009
Coastline Coverage (km)	2,495	19,924
Shared Borders (km)	1,607	12,048
Square Land Area (km)	120,538	9,826,675

⁴⁰ <https://www.globalfirepower.com/navy-aircraft-carriers.asp>

⁴¹ <https://fas.org/sgp/crs/nuke/R44994.pdf> pg 15

⁴² <https://www.globalfirepower.com/countries-comparison-detail.asp?form=form&country1=north-korea&country2=united-states-of-america&Submit=COMPARE>

Table 2.2: Total Military Personnel, Aircraft, and Naval Assets



In an effort to compensate for such a military handicap, Pyongyang has been adopting asymmetric capabilities. This would include not only chemical and biological weapons, but also capabilities for Weapons of Mass Destruction (WMD). Asymmetric warfare is an approach by which the army's leaders try to "circumvent or undermine military strength while exploiting their weaknesses, using methods that differ significantly from the expected method of operations."⁴³ As previously discussed, the effect of the security dilemma results in countries pouring resources into military and weapons technology in an effort to strengthen its position vis-à-vis its adversary. For North Korea, this adversary is clearly the United States and its allies, including South Korea. Realizing that its own military capabilities is unable to compete directly with that of the United States, it makes sense that asymmetric capabilities could provide North Korea with assurances given its weakness in other areas of its military potency. Such asymmetric capabilities are not only a concern where they may be used against targets deemed necessary by the DPRK, but also in terms of international trade, where the DPRK may be willing to export and exchange information and technology with other pariah states, terrorist organizations, or other non-state actors who may be considered threats to the United States.

⁴³ Sudhir, M.R. "Asymmetric War: A Conceptual Understanding." *CLAWS Journal*. 2008. Retrieved from http://www.claws.in/images/journals_doc/742067376_MBSushir.pdf. 58

Chapter 2: The Failure to Dismantle North Korea's Nuclear Program

I. North Korean Nuclear Program Forges On

The DPRK's nuclear weapons program poses a potential existential threat to its nearest neighbors, such as South Korea and Japan, and indeed to the entire global community. Two decades of mostly U.S.-led international attempts to solve the North Korean nuclear crisis have resulted in abrupt twists and turns. Nearly all possible approaches—both carrots and sticks—have been adopted by the international community to curb the isolated nation's nuclear ambitions. Yet, even the recent landmark summit between the United States and North Korean leaders in June 2018 has not provided any tangible progress toward the denuclearization of Pyongyang and may have only complicated the issue. Such impasses, particularly of United States-foreign policy on the Korean peninsula, raise the following question: Does a solution to breaking the nuclear deadlock even exist?

Efforts toward denuclearization and non-proliferation on nuclear weapons had been made, but to no avail. The DPRK joined the Non-Proliferation Treaty (NPT) in 1985, agreeing to prevent the spread and development of nuclear weapons and weapons technology with the ultimate goal of disarmament.⁴⁴ However, joining this treaty did not mean that the DPRK would play by the rules set forth by the international community. In fact, the NPT became a bargaining tool for the North Korean regime to extract benefits from the international community. Threatening to withdraw from the NPT, the United States and the DPRK signed the Agreed Framework in 1994, where the DPRK gained concessions of international foreign aid and normalizing United States-DPRK relations in

⁴⁴ Gershman, John and Huntley, Wade L. "North Korea and the NPT." Institute for Policy Studies. October 2005. Retrieved from https://ips-dc.org/north_korea_the_npt/

exchange for halting its plutonium weapons program.⁴⁵ Nevertheless, this approach soon faltered as the DPRK withdrew from the NPT, after the Bush administration declared the state part of the “axis of evil.” The DPRK announced in January 2003 its withdrawal from the NPT, claiming that “the withdrawal from the NPT is a legitimate self-defensive measure taken against the U.S. moves to stifle the DPRK and the unreasonable behavior of the IAEA following the U.S.”⁴⁶ Thus, for the DPRK, perceived hostility against the country in the form of both U.S. rhetoric and the IAEA investigations propelled North Korea from abandoning this international mechanism that would have placed greater checks on its nuclear development.

In line with the NPT, North Korea had also been involved in the Six Party Talks, among North Korea, South Korea, the United States, Japan, China, and Russia. Initiated in August 2003, the Six Party Talks allowed for a forum in which the six nations could come to an agreement on the denuclearization of the Korean Peninsula. Certain progress was made through this mechanism. In 2005, following the fourth round of talks, the DPRK “committed to abandoning all nuclear weapons and existing nuclear programs and returning, at an early date, to the Treaty on Nonproliferation of Nuclear Weapons and to IAEA safeguards” while the Six Parties in general reaffirmed the “verifiable denuclearization of the Korean Peninsula in a peaceful manner.”⁴⁷ Following this development, the subsequent rounds of the Six Party Talks in 2007 led to more progress on denuclearization, where the Parties began to work on a roadmap on the

⁴⁵ “Agreed Framework Between the United States of America and the Democratic People’s Republic of Korea.” *US Department of State Archive*. October 1994. Retrieved from <https://2001-2009.state.gov/t/ac/rls/or/2004/31009.htm>

⁴⁶ *Ibid.*

⁴⁷ “Joint Statement of the Fourth Round of the Six-Party Talks.” *US Department of State*. September 2005. Retrieved from <https://www.state.gov/p/eap/regional/c15455.htm>

implementation of the ideas set forth in 2005. Among the agreements made in 2007 were declarations that North Korea would commence the dismantling of its nuclear programs by the end of the year, starting with the Yongbyon facilities, declare all its nuclear capabilities and prevent any transfer of material or knowledge of nuclear weapons abroad.⁴⁸

Nevertheless, much like the NPT, the Six Party Talks eventually hit a stalemate as the DPRK refused to return to the talks in 2009. While progress seemed to be going forward, the reality was that nothing was really being done. The talks hit an impasse with U.S. restrictions on Banco Delta Asia, where the DPRK held fifty accounts, which resulted in increased DPRK provocations, namely a long-range rocket testing and an underground nuclear test in 2006. However, returning to the talks, the DPRK began making certain concessions, such as the details of its dismantling of Yongbyon, but ultimately it failed to agree to a verification protocol, which strained its relations with the United States. By the end of 2008, the DPRK reneged on its initial agreement and began its program, refusing to let international inspectors into the country.⁴⁹ Ultimately, the Six Party Talks had failed. This may also be due to the impasse created by the conditions from the United States and South Korea that the DPRK had to show signs that it was committed to denuclearization, while the DPRK wanted talks without conditions or stipulations.

Since the failure of the Six Party Talks and Kim Jong-un's assumption of power in 2011, the DPRK has doubled its efforts on nuclear technology, specifically on the

⁴⁸ "Statement by the President on Agreement Announced at Six-Party Talks." *US Department of State Archive*. October 2007. Retrieved from <https://2001-2009.state.gov/p/eap/rls/prs/2007/93212.htm>

⁴⁹ Bajoria, Jayshree and Xu, Beina. "The Six Party Talks on North Korea's Nuclear Program." *Council on Foreign Relations*. September 2013. Retrieved from <https://www.cfr.org/background/six-party-talks-north-koreas-nuclear-program>

development of nuclear weapons technology. North Korea carried out the launch of its largest and most powerful ballistic missile, the Hwasong-15 late in 2017. The idea that its weapons were now capable of hitting the U.S. mainland came as a surprise to many as the international community had largely underestimated North Korea's willingness and its capacity to pursue such a goal in a relatively short amount of time. Many scholars in the field have recognized that Pyongyang's most recent ICBM test as indeed successful, unlike previous attempts in the earlier developmental stages of the country's nuclear program. Vipin Narang has also supported the claim that the DPRK's launch was successful via his personal social media account, claiming, "It is real."⁵⁰ Kim Jong-un was able to recognize the immense deterrent power of nuclear weapons in the early days of his rule—perhaps even before truly consolidating his power among the North Korean political elite.

II. The U.S. Response to North Korean Denuclearization

Given American hegemony during the late 20th and early 21st century, the United States would seem to have the answer to solving the North Korean nuclear crisis—or at least that it has the upper hand, allowing it to manage the issue to suit its own interests. Since the early 2000s, the United States has adopted what the Obama administration called the "Strategic Patience" policy in regard to North Korea, whereby the United States declines to engage with North Korea until the DPRK demonstrates "positive, constructive behavior and a genuine willingness to negotiate."⁵¹ According to this strategy, the United States has ignored North Korea except to levy harsh sanctions,

⁵⁰ Narang, Vipin. "Vipin Narang (@NarangVipin)." Twitter. <https://twitter.com/NarangVipin>.

⁵¹ "The Value of Strategic Patience." *International Affairs Review*. 2011. <http://www.iar-gwu.org/node/290>.

waiting for the DPRK to denuclearize. The Obama administration's hardline policy was especially evident in UNSC decisions and sanctions against North Korea—yet many have objected that a policy of “Strategic Patience” merely masks an undue passiveness in resolving this urgent issue. This has been evident in the positioning taken by the United States and its ally, South Korea, in taking the hardline position of having the DPRK provide a demonstrable willingness to give up its nuclear program before resuming the Six Party Talks.

The Trump administration has also taken a similarly tough stance, insisting that the United States will not accept North Korea as a nuclear state. Yet amid a swell of public opinion fearing U.S. military action against Pyongyang, the Trump administration claimed that the United States is seeking neither regime change nor regime collapse in North Korea.⁵² The slogan advises “maximum pressure and engagement,” seeking thereby to correct the previous administration's failure to solve the problem while ensuring its neighboring countries of a low possibility of a war.⁵³ It appears, at least on the surface, that the United States' ultimate goal on the North Korean issue is the denuclearization of the DPRK so as to secure regional and global peace. The number one priority remains the denuclearization and the dismantling of the DPRK's nuclear weapons program rather than a regime collapse. Although any attempt to judge the performance of the Trump administration's “maximum pressure and engagement” policy would be premature at this juncture, it could easily become another “failed” foreign

⁵² “North Korea: US Not Seeking Regime Change, Says Rex Tillerson.” *BBC News*. 2017. <http://www.bbc.com/news/world-us-canada-40797613>.

⁵³ “Trump's Strategy on North Korea: ‘Maximum Pressure and Engagement,’ Officials Say.” *Chicago Tribune*. 2017. <http://www.chicagotribune.com/news/nationworld/ct-trump-north-korea-strategy-20170414-story.html>.

policy attempt to solve the North Korean nuclear impasse to denuclearize the isolated nation.

As the tension between the DPRK and the United States increased and the war of words continued to heat up between DPRK's Kim Jong-un and U.S. President Trump, talks of denuclearization was still not completely dead. As the escalation between the two leaders subsided, both Kim and Trump met in Singapore in June 2018 on not only United States-DPRK relations, but also on the important topic of denuclearization of the Korean peninsula. To alleviate the pressures felt by the DPRK from the United States, Trump had agreed on certain security guarantees while Kim "reaffirmed his firm and unwavering commitment to complete denuclearization of the Korean Peninsula."⁵⁴ Despite this outward progress on the issue, the actual denuclearization and disarmament of the DPRK remains to be seen. Speaking after the Singapore summit in the summer of 2018, U.S. Defense Secretary James Mattis noted a lack of clear indication that North Korea would indeed denuclearize and was skeptical that such negotiation would even commence at that point.⁵⁵ This outlook seems to have come into fruition as the DPRK has returned to its old habits within a few months of the Singapore summit. While it seems that the test was not of a nuclear device or a long-range missile, the DPRK announced on November 16, 2018 that it had successfully test a "newly developed ultramodern tactical weapon."⁵⁶ Thus, while denuclearization may not be completely off the table, given continued albeit

⁵⁴ "Joint Statement of President Donald J. Trump of the United States of America and Chairman Kim Jong Un of the Democratic People's Republic of Korea at the Singapore Summit." *White House*. Jun. 12, 2018. Retrieved from <https://www.whitehouse.gov/briefings-statements/joint-statement-president-donald-j-trump-united-states-america-chairman-kim-jong-un-democratic-peoples-republic-korea-singapore-summit/>

⁵⁵ Borger, Jaulia. "No sign of North Korea dismantling nuclear weapons programme, Mattis admits." *The Guardian*. Jun. 20, 2018. Retrieved from <https://www.theguardian.com/world/2018/jun/21/no-sign-of-north-korea-dismantling-nuclear-weapons-mattis-admits>

⁵⁶ Associated Press. "North Korea tests new 'ultramodern tactical weapons' amid stalled nuclear diplomacy." *NBC News*. November 2018. Retrieved from <https://www.nbcnews.com/news/world/north-korea-tests-new-weapon-amid-stalled-nuclear-diplomacy-n937066>

stalled bilateral discussions with the United States, the DPRK continues to bolster its weapons development program.

III. China's Response to North Korean Denuclearization

However, the United States is not solely to blame for the lack of progress on the denuclearization of North Korea. China remains a key lifeline to the hermit nation, and as such faces equal pressure from the international community whenever violations of UNSC sanctions are brought to light by very evident provocations. Nevertheless, direct and assertive pressures from China have not materialized. Rather the North Korean gridlock has continued, and so will the blaming game, with the United States and China arguing about who is more accountable for the North Korean nuclear impasse: Whenever tensions escalate on the Korean peninsula, China blames the United States, who is “supposed” to discharge certain duties as a leader in solving global security problems. Such a sound argument seems more relevant when applied to South Korea, of which the United States is an ally and protector. The United States, for its part, promulgates the “China responsibility theory,” which asserts that China should put greater pressure on North Korea.⁵⁷ Because China has relatively close economic and diplomatic ties with the DPRK, the international community, and particularly the United States, takes the view that the PRC could help restrain North Korea by imposing sanctions and so isolating the DPRK from the global arena as to make it cease its provocations.

While the United States may consider China has having a very real and influential role in curbing North Korea, the reality may be that the relationship between the DPRK

⁵⁷ “China Urged to Do More to Stop North Korea’s Nuclear Programs.” *New York Post*. 2017. <http://nypost.com/2017/07/27/china-urged-to-do-more-to-stop-north-koreas-nuclear-programs/>.B

and China may be significantly different than in the past. It is certainly true that China and the DPRK shared a special relationship in the past, especially as some of the few communist countries on the Asian mainland. This was evident in the close political relationships during the Kim Il Sung and Kim Jong-il eras, but also during many of the multilateral meetings regarding the DPRK, where China acted as a buffer to protect the DPRK, given its power as one of the permanent members of the United Nations Security Council (UNSC). During this time, China did not act towards the DPRK without regard to the DPRK's flagrant disregard for international sanctions and norms. Following the first nuclear test in 2006, while the UNSC imposed unanimous sanctions against the country, China condemned the acts and called for the DPRK to "stop all the activities that might further de-stabilize the region, and back to the Six Party Talks."⁵⁸ Even after the bigger test in 2009, coupled with the DPRK's abandonment of the Six Party Talks altogether, China continued its assertive tone, unanimously adopted further sanctions against the DPRK including the search of North Korean cargo ships, as part of the UNSC. Although China saw the DPRK's actions as a disregard for international norms and objectives, China's ambassador to the UN at the time, Zhang Yesui, emphasized that diplomatic means rather than coercive force should be used in dealing with the DPRK, not just economic sanctions that could affect the humanitarian assistance or development of the country.⁵⁹ Yet, even with Chinese pressure on the DPRK, noticeable changes did not take place. This could be due to China's actions against the DPRK being seen as watered down rather than an aggressive stance that would drive a wedge between the two

⁵⁸ Huang, Kristin. "How China responded to previous North Korean nuclear tests." *South China Morning Post*. September 2017. Retrieved from <https://www.scmp.com/news/china/diplomacy-defence/article/2109692/how-china-responded-previous-north-korean-nuclear-tests>

⁵⁹ Huang.

countries, especially as China had a strategic interest in upholding the DPRK, an issue that will be discussed in greater length in the following chapter.

However, it is important to note that the relationship between the DPRK and China has shifted since Kim Jong-il. With the ascendancy of Kim Jong-un, the relationship between China and North Korea was drastically and unexpectedly altered with the execution of Kim's uncle, Jang Song-thaek in 2013. Jang had previously been integral in the DPRK's link to China, having been a key figure in helping bridge ties between the DPRK during Kim Jong-il's rule and China, in addition to the China-backed reforms to revitalize the DPRK economy. With the loss of Jang, expert on northeast Asian security at the University of Sydney Jingdong Yuan suggests that "this is not a welcome development as far as China is concerned."⁶⁰ At the moment of Jang's execution, the bilateral relationship between China and the DPRK was already on shaky ground, given the lack of bilateral visits made between China and the DPRK, unlike that of Kim Jong-il's regime. This episode certainly strengthened the view of China's losing grip on the DPRK, as Kim Jong-un continued to engage in missile launches and nuclear test without regard to China's condemnation or pressure, leading to the stricter stance taken by China with regard to the UNSC sanctions against the country.⁶¹ This was made evident in the aftermath of the February 2013 tests, where China went as far as to contact the North Korean ambassador regarding the test, an unprecedented move by the Chinese. Nevertheless, such actions went unheeded as the DPRK continued to test its nuclear and weapons capabilities, such as during January 2016, its fourth nuclear test, followed by a

⁶⁰ Bodeen, Christopher. "The Execution of Kim Jong-Un's Powerful Uncle Leaves China in A Very Delicate Position." *Business Insider*. December 2013. Retrieved from <https://www.businessinsider.com/jang-song-thaek-execution-and-china-2013-12>

⁶¹ Bodeen.

fifth one in September of the same year. Ultimately, Chinese influence seems to have been rather minimal, as its tougher stance was not able to deter North Korea from continuing on its path of nuclear weapons development.

In the latest negotiations, China continues to take more of a backseat than in the past. Perhaps this is due to the strained relationship between the two countries and Kim's own desire to distance his regime from the influence of China. This does not mean that China is completely out of the picture. While China does not want a nuclear-armed North Korea, it is in favor of a DPRK strong enough to resist U.S. pressure, which would be in China's favor. But more importantly, Chinese priorities over mediating on the nuclear issue on the Korean peninsula are not as high as that of the U.S. national security agenda.⁶² Furthermore, China still has teeth in the game, especially in light of the visits conducted by Kim to meet with Chinese President Xi Jinping. In March 2018, Kim made his first visit to Beijing since he assumed power in 2011, with a visit by Song Tao, head of the International Liaison Department of China's Central Committee, to Pyongyang only a few weeks later in mid-April. This was subsequently followed by a visit by Kim to Xi in the city of Dalian in May, prior to Kim's summit with Trump in June.⁶³ In October 2018, it was also announced that Xi would make his own visit to Pyongyang, his first since assuming power in 2013.⁶⁴

Even as China has taken a muted role when compared to the past, China has not relegated the issue of North Korea's denuclearization solely to the hands of the United

⁶² Linter, Bertil. "China's Shifting View on the Korean Peninsula." *Asia Times*. October 2018. Retrieved from <http://www.atimes.com/article/chinas-shifting-view-on-the-korean-peninsula/>

⁶³ Linter.

⁶⁴ Lee, Jeong-ho. "China's President Xi Jinping will make first visit as president to North Korea 'soon', says South Korean leader." *South China Morning Post*. October 2018. Retrieved from <https://www.scmp.com/news/china/diplomacy/article/2167408/chinese-president-xi-jinping-will-visit-north-korea-soon-says>

States. In fact, it is in China's interest that the unification or amelioration of the relationship between the two Koreas happens, with a peace treaty finally being agreed upon. In this case, there would be no need for an American military presence on the peninsula. In this scenario, both Koreas, due to political and economic concerns would naturally tilt more towards China than the United States. While China has passed the buck to the United States on dealing with North Korea's nuclear program for now, it continues to maintain and further develop its ties to the country not only through the increased political visits but also through the trade that continues to sustain the regime amidst the severe sanctions.⁶⁵

Thus, in the midst of the hegemonic battle of the United States and China in the East, each country blames the other for not discharging its "responsibilities" during this nuclear crisis. Breaking the current deadlock does not seem quite possible, especially as the DPRK draws ever nearer to developing its own WMDs. Yet an in-depth analysis reveals that the opportunity for leverage on the international stage offered by the North Korean crisis still seems to outweigh considerations of international peace and security for the United States and China. Furthermore, Pyongyang was forced into a Hobson's choice when it chose to develop WMDs. Therefore, the United States and China's strategic interest in North Korea and the current crisis and their geopolitical strategies of interventionism in East Asia explain the reason for the North Korean nuclear deadlock. Not only was Pyongyang bound to develop its own nuclear weapons out of security concerns, but also the geopolitics and the intertwined interests on the Korean peninsula from outside have made it nearly impossible for the nuclear crisis to be solved.

⁶⁵ Linter.

IV. International Response to DPRK Denuclearization

The UN Security Council has passed a number of resolutions in an effort to punish DPRK for activities that have undermined global peace and security, and the United States has implemented harsh sanctions through both unilateral and multilateral measures to isolate the regime.⁶⁶ Following its first nuclear test in 2006, the UNSC levied sanctions under Resolution 1718, which limited the supply of heavy weaponry, missile technology and other such materiel, and certain luxury goods. Despite such punishments, however, the DPRK under the Kim Jong-il regime continued their progress on nuclear weapons technology, resulting in UNSC Resolution 1874 after the second nuclear explosion measured in 2009.⁶⁷ Resolution 1874 strengthened the previous Resolution 1718, expanding limits on the import and export of arms and related material, along with the prohibition of financial transfers and services in relation to such activities, where states had to report on inspections and seizures of sales, transfers, and supply of such arms prohibited by the resolution.⁶⁸

Yet, even with such unbearable pressure from the outside, North Korea's constant provocation through missile launches over the past decade have demonstrated how desperate the country has been to achieve the status of a nuclear-armed state. North Korea's nuclear program did not end with the death of Kim Jong-il, but rather gained momentum under the rule of his son, Kim Jong-un. Within a span of five years, the

⁶⁶ "Resolutions Security Council Subsidiary Organs." United Nations. <https://www.un.org/sc/suborg/en/sanctions/1718/resolutions>.

⁶⁷ Albert, Eleanor. "What to Know About the Sanctions on North Korea." *Council on Foreign Relations*. January 2018. Retrieved from <https://www.cfr.org/background/what-know-about-sanctions-north-korea>

⁶⁸ "Security Council Resolution 1874 (2009). *United Nations*. June 2009. Retrieved from <https://www.un.org/sc/suborg/en/s/res/1874-%282009%29>

UNSC adopted Resolutions 2094 and 2087 in 2013, Resolutions 2321 and 2270 in 2016, and Resolutions 2375, 2371, and 2397 in 2017. These resolutions were all in response to the continuing nuclear tests conducted by the DPRK, as well as violations of previous sanctions on satellite and missile launches and other such provocations. Such sanctions further limited imports on necessary resources not only for nuclear weapons development but also on missile technology, along with oil, metal, and agricultural and labor imports and exports.⁶⁹ Nevertheless, as the most recent weapons testing in November 2018 demonstrated, such UN sanctions have been unsuccessful in deterring the DPRK from engaging in further weapons development.

Meanwhile, in order to curb the proliferation of nuclear weapons in North Korea, other countries have also imposed bilateral sanctions, including the EU, United States, South Korea, and Japan. In response to the nuclear testing, the European Union imposed further sanctions, preventing those who had facilitated North Korea's weapon testing from admission or residence, denying specialized training for North Koreans in the EU, prohibiting the export of luxury goods, banning EU investment, and capping remittances back to North Korea. The United States on the other hand has not only sanctioned North Korea preventing them with materiel access necessary for the development of their nuclear weapons technology but also against third party entities that funnel funds into North Korea, including Chinese banks, Russian firms, and other companies who have violated U.S. export controls against North Korea. During the Kim Jong-il era, Japan imposed sanctions on the DPRK, starting in 2006, as a response to renewed nuclear testing, restricting both diplomatic and economic exchanges but subsequently lifted some sanctions as a means to compel the Kim

⁶⁹ Albert.

Jong-un regime to re-open the investigations of Japanese abductions that occurred in the 1970s and 1980s. Despite this temporary easement of sanctions, Japan imposed new sanctions once again in 2016 and 2017 following the increased provocations and testing conducted by the DPRK, freezing some North Korean and Chinese assets, limiting remittances, and banning the entry of North Koreans.

For South Korea, the issue of harsh sanctions levied against the DPRK has been more complex. In order to ameliorate the tense situation between the DPRK and the ROK, the South Korean government has often provided the North with humanitarian assistance, along with certain economic concessions, including the joint project at the Kaesong Industrial Complex, located in North Korean territory. Provocations in recent years, however, limited these concessions as seen with the sinking of the South Korean naval ship, the Cheonan, in 2010. The May 24 measures, as they were called, prevented North Korean ships from using shipping lanes in South Korea, suspended inter-Korean economic exchanges except those at Kaesong, and prohibited most cultural exchanges.⁷⁰ Nevertheless, by 2016, even the Kaesong Industrial Complex had been closed indefinitely. While South Korean President Moon Jae-in may seek a more conciliatory approach to the DPRK, South Korea also maintains several new rounds of international sanctions. South Korea most recently approved \$8 million in humanitarian aid to North Korea, separating them from political issues, but upholds

⁷⁰ Fifield, Anna. "Punishing North Korea: A rundown on current sanctions." The Washington Post. February 2016. Retrieved from https://www.washingtonpost.com/news/worldviews/wp/2016/02/22/punishing-north-korea-a-run-down-on-current-sanctions/?utm_term=.4076f096aa5b

the sanctions levied against its neighbor to the north, seizing a ship suspected of importing oil to North Korea in December 2017.⁷¹

Again, however, all such international sanctions, whether they come in the form of UN Security Council resolutions or bilateral sanctions levied against the DPRK, has proved ineffective in actually coercing North Korea to abandon its nuclear weapons program. North Korea has suffered under these sanctions for a long time now, and further sanctions may be ineffective as well. Both nuclear deterrence and international sanctions have proved that they are not successful in stopping the North Korean nuclear weapons program. Thus, there must be another way to induce North Korea to abandon its program apart from these already tried and ineffective methods.

V. Case Study on Denuclearization: South Africa

While the denuclearization of the DPRK has been deemed ineffective as of yet, especially given its most recent test, other examples of denuclearization in the past have yielded greater success more or less. States such as Belarus, Kazakhstan, and Ukraine willingly gave up their nuclear arsenals after their independence from the Soviet Union. However, the difference between these countries and that of the DPRK is that these countries never actually created and developed their own nuclear technology as a response to threats to the sovereignty of these countries. Instead, much of their respective nuclear arsenals were inherited from the Soviet Union, where as independent states, they did not have power to maintain or control these

⁷¹ Park, Yuna and Jin, Hyunjoo. "South Korea seizes second ship suspected of providing oil to North Korea." *Reuters*. December 2017. Retrieved from <https://www.reuters.com/article/us-northkorea-missiles-southkorea-ship/south-korea-seizes-second-ship-suspected-of-providing-oil-to-north-korea-idUSKBN1EP04P?il=0>

weapons. Furthermore, receiving support from the United States and security assurances from Russia provided enough incentive to rid themselves of their nuclear weapons arsenal, some of the largest stockpiles as Ukraine and Kazakhstan would have been the third and fourth largest nuclear powers had they kept their arsenals.⁷² From this perspective these experiences of denuclearization may not have the most direct relevance on the denuclearization of North Korea. However, on the other hand, the denuclearization of South Africa could have more tangible lessons for the North Korean case, as they developed, tested, and ultimately dismantled their nuclear weapons program.

The root of South Africa's nuclear program lies at the apartheid regime that was set up in 1948 by the ruling National Party, where the white minority placed greater racial restrictions on the majority black population. As a response to this racially divisive program, the international community placed greater sanctions on the country, further isolating the nation. In the meantime, the independence movements and the growing communist trends in neighboring countries, such as Angola and then South Africa controlled Namibia created an environment of insecurity.

Within these currents, South Africa's natural resources and existing technology allowed for the perfect incubator for the country to develop its own nuclear arsenal as a means to secure its safety against potential threats to the regime. In creating a nuclear arsenal, South Africa possessed a key ingredient – one of the world's largest reserves of uranium ore, otherwise known as yellowcake, providing the United States and the United Kingdom nearly 40,000 tons of the material over the next few decades following World War II. South Africa, in its own part, created the Atomic Energy

⁷² Friedman.

Board (AEB), in order to conduct its own nuclear research, which was later aided by U.S. President Dwight D. Eisenhower's "Atoms for Peace" initiative that agreed to share a nuclear research reactor, SAFARI-I. It was with the United States' assistance that South Africa continued its nuclear research, specifically for the peaceful applications of nuclear energy. Then by the late 1960s, South Africa began to shift its research on "peaceful nuclear explosives" along the lines of the U.S. own Project Plowshare, and by 1971, the Atomic Energy Corporation (formerly the AEB) started investigative work on nuclear weapons.⁷³

However, South Africa's domestic politics and international strategy began to influence the development of nuclear weapons in earnest. The apartheid regime that disenfranchised the non-white majority was deemed by the United Nations General Assembly in 1973 as "a crime against humanity and that inhuman acts resulting from the policies and practices of apartheid and similar policies and practices of racial segregation and discrimination... are crimes violating the principles of international law... and constituting a serious threat to international peace and security."⁷⁴ As a result of the apartheid regime, South Africa experienced a period of isolation from the West and the rest of the international community. With the scope of the Cold War and Soviet influence increasing on the African continent, South Africa viewed this isolation as a major national security threat. As former South African President F.W. de Klerk notes, "because of apartheid South Africa was becoming more and more isolated in the eyes of the rest of the world. There wouldn't be, in the case of Russian

⁷³ "South African Nuclear Program." *Atomic Heritage Foundation*. August 2018. Retrieved from <https://www.atomicheritage.org/history/south-african-nuclear-program>

⁷⁴ "International Convention on the Suppression and Punishment of the Crime of Apartheid." *United Nations*. November 1973. Retrieved from <https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/281/40/IMG/NR028140.pdf?OpenElement>

aggression or invasion, assistance from the international community.”⁷⁵ Thus, as a key example of the security dilemma, South Africa’s only recourse seemed to be that of nuclear weapons, even if de Klerk does contend that such an arsenal was only meant to be used as a deterrent than an actual use of force.

All the while South Africa received scrutiny over its domestic policies, Soviet influence in neighboring African territories created a keen sense of a security threat. The Soviet Union’s presences and activities in southern Africa presented a threat to the very survival of South Africa. While the USSR provided weapons, technology, and know-how to various liberation movements, they were gaining either direct or indirect control of those countries, as they gained independence. According to former President de Klerk, the Soviet Union “financed the deployment of many thousands of Cuban troops, especially to Angola, and this was interpreted as a threat first by Prime Minister John Vorster, and following upon him P.W. Botha.”⁷⁶ For the ruling party in South Africa, the close ties between these communist governments and the anti-apartheid African National Congress certainly posed a threat to their rule and control over the country as well. Causing further concern was the war of independence in South West Africa, now known as Namibia, which was under South African control. The fear was that communists could now use these newly independent and communist leaning governments as a stepping stone to launch a communist attack against the country.⁷⁷

⁷⁵ Friedman.

⁷⁶ Friedman.

⁷⁷ Keating, Joshua. “The South Africa Precedent.” *Slate*. March 2018. Retrieved from <https://slate.com/news-and-politics/2018/03/what-can-we-learn-from-south-africas-decision-to-give-up-its-nukes.html>

Thus, by 1974, South African Prime Minister John Vorster approved the nuclear weapons program, as the country began developing a uranium gun-type bomb such as that used in Hiroshima. While the AEC constructed a uranium enrichment Y-plant, it never actually had a test detonation, due to international pressure mounting on the country.⁷⁸ South Africa ultimately created six uranium gun fission weapons of the sort used in Hiroshima but did not have the missile capabilities to carry and deliver such weapons. If they were to be used at all they would have had to be done so by bombers. Nevertheless, South Africa continued to explore the options of upgrading the devices themselves. Ultimately, however, the possession of nuclear weapons brought a certain sense of political clout to the country. In having such nuclear weapons technology, South Africa would never actually deploy them against their neighbors in Africa. Instead, the demonstration of South Africa's nuclear capabilities was meant to induce its allies to support it in its most dire time of need. According to nonproliferation expert David Albright, such the possession of such technology was "not based on war-fighting, but rather was intended as a political strategy designed to force Western powers, particularly the United States, to assist South Africa against an overwhelming military threat to its territory, or what was referred to in strategy documents as finding itself with 'its back against the wall.'" ⁷⁹ Since its allies had already distanced itself from the country, especially with the 1977 UN Security Council embargo, South Africa perceived itself as the sole defender against communism in southern Africa. Thus, the threat of nuclear war would induce these former allies to come to South Africa's aid to prevent an all-out nuclear war. In this

⁷⁸ "South African Nuclear Program."

⁷⁹ Keating.

way, the theory of mutually assured destruction works in a way that South Africa becomes an extension of the First World. An anti-communist nuclear attack against communist Africa becomes an attack from the First World against the Second (the Soviet Union).

The motivations of the Soviet threat above all other considerations provides an insight into why the South African government decided to give up its nuclear arsenal. With the fall of the Soviet Union, South Africa no longer had this threat at its doorstep. Even though states such as Angola had a communist government in place, such states now had no conventional military backing in order to pose a direct threat to South Africa's existence. With the election of de Klerk as President, the nuclear weapons program was dismantled given the changing environment that had originally induced South Africa to engage in a nuclear weapons program in the first place. As de Klerk mentions regarding the denuclearization of South Africa:

With the coming down of the Berlin Wall, and the breakup of the USSR, the threat of Soviet communist expansionism fell away. Simultaneously, I took initiatives to start a constitutional dialogue and to bring an end to apartheid. A peace accord was signed [in Angola], the Cuban troops were withdrawn, [the southern African state of] Namibia became independent. All those factors brought us to the point where even if you were a supporter of having nuclear weapons, the rationale for that fell away and the nature of [the] threats changed fundamentally.⁸⁰

The threat assessment that had dictated the need for nuclear weapons was no longer there. The Soviet Union's presence and ability to militarily back up the communist governments in Angola and the rebels in Namibia were gone. Thus, there was no need for nuclear weapons to induce South Africa's allies to come to its aid in the case of a communist attack. Furthermore, with the factors leading up to the end of apartheid, South

⁸⁰ Friedman.

Africa was no longer deemed as a pariah state, where it was shunned by the international community. Again, this undermined the need for nuclear weapons as previously espoused by the government. Once again, South Africa was part of the international community and without the Soviet threat had no need for a nuclear deterrent.

On the other hand, there is also speculation that the dismantling of the nuclear program had other considerations, particularly the shift in the control of the government from white National Party to the multiracial African National Congress. Some suggest that the dismantling of the nuclear program was motivated by the desire to prevent the ANC from having control over such technology. However de Klerk has denied this, saying that the idea of preventing the ANC government from having atomic weapons was in no way part of his motivation.⁸¹ This seems like a moot point as well given the desire for most, although not all, of the ANC for the dismantling of the nuclear program, where the ANC made this point a rallying cry during the 1994 elections. Nevertheless, there is an argument to be made that the government under de Klerk represented a regime change from the traditionalist, racist white majority rule of the National Party to the eventual election of the black majority African National Congress.⁸² Significant in this analysis is that the end of apartheid provided a venue through which South Africa could rejoin the international community, where the voluntary dismantling of its nuclear weapons program provided a greater legitimacy to South Africa's return and acceptance into the international community.

Within this light, South Africa's denuclearization and dismantling of its nuclear weapons could be an opportunity for application in the North Korean case. What is

⁸¹ Friedman.

⁸² Keating.

important to understand in this case, however, is that currents both within and outside of South Africa induced the country to give up its nuclear arsenal. Within, there was a movement to dismantle the system of apartheid, a major impediment that caused condemnation from the international community. In fact, it was due to the policy of apartheid that led to the embargos and isolation that compelled South Africa to pursue nuclear weapons as a method of political strategy in the first place. Furthermore, the situation beyond its borders also worked together where the need of nuclear weapons became unnecessary. Without the Soviet Union's military and economic backing of neighboring communist governments and the presence of Cuban forces, South Africa no longer faced the imminent threat of invasion by such forces. That these two internal and external forces would work together to help the DPRK move away from its nuclear weapons program seems yet to be seen. With respect to the DPRK, its threat assessment is not as simple as was the case for South Africa. The United States and South Korea remain a constant and ongoing external threat to the country, while regime change is not expected to happen.

One important lesson from the South African case is also the use of economic sanctions to induce the government to change. Thus far, with regard to the DPRK, economic and political sanctions have yet to bear fruit. This was much the same for South Africa. With the imposition of sanctions and the embargo, South Africa did not move away from its nuclear weapons development even if it did eventually have a role to play. Rather such punishments levied against the country had the opposite effect. In the late 1970s, with the embargo in place, South Africa actually accelerated its programs. With respect to North Korea, such sanctions may be useless, especially given the support

provided by China and through the humanitarian assistance provided by South Korea. Any concessions made due to sanctions is not likely to provide the international community with a quick and immediate result in denuclearization. Furthermore, the reason that international pressure had worked on South Africa was because the government wanted to be part of the international community rather than exist in its isolation. This is quite different from the desires of Kim Jong-un, who prides the nation on rebuffing its most powerful adversary, the United States, and still existing despite years of “coercive” diplomacy aimed at either regime collapse or denuclearization. Just as South Africa used the existence of nuclear weapons as a political ploy to gain Western support, North Korea uses its nuclear arsenal to gain concessions from the international community, including more humanitarian aid.

Chapter 3: The Motivations of North Korea's Nuclear Development

In analyzing the motivations of North Korea's nuclear development, the theories of traditional deterrence must be re-examined. As North Korea becomes that much closer to becoming a full-functioning nuclear weapons state, the theories of deterrence as espoused by Schelling goes out the window. As seen through the provocations and war of words between U.S. President Trump and Kim Jong-un in the earlier half of 2018 show, misperception and the fog of war clearly affect the trajectory in the escalation of conflict. Rather than following the narrative of Schelling in terms of the security dilemma alone, North Korea's nuclear and conventional weapons development is indeed affected by a number of different stresses which may provide a better light of understanding the failures of North Korean denuclearization.

I. Regime Survival

For the DPRK, regime survival is the first and the most significant objective of all, as it is greatly threatened by the widespread—or nearly universal—Western ideals of democracy as a communist state. Thus, the United States, as a leading proponent of democracy, has been trying to bring down the communist regime, although recently the Trump administration has announced publically that it is not seeking a regime change, which can be seen as an effort pacify Kim Jong-un. Yet, although it had made such an announcement, what the United States truly desires out of North Korea remains the same. Therefore, the regime survival has been and will be always at stake without the “ultimate deterrence” of possessing its own nuclear weapon, and Kim Jong-un seems to be aware of the reality.

Although North Korea itself has decided to travel down the path of nuclear proliferation, we cannot blame the DPRK alone for what has happened during the past decade. Many nations in Northeast Asia have experienced insecurity amid a changing geopolitical structure, particularly as a result of tensions between the United States and China, two powers that are locked in a struggle to oppose each other while containing other nations through interventionist efforts—thereby gaining power while making other states dependent on them. All this has driven North Korea, in particular, into a corner. More even than other nations in the region, the DPRK has suffered the most during this superpower showdown—which has largely overlooked this nation, spurning it for its nearly nonexistent diplomatic influence, waning economy, and other domestic struggles.

North Korea avows that its reason for developing WMDs is to ensure the regime's survival and autonomy, having indeed once stated that “the more our enemies try to take away our sovereignty and autonomy, our nuclear strike capability and national defense grows only stronger.” At a surface level, building such a capability is about survival, as mentioned above. Yet, the DPRK also desires diplomatic recognition by the international community, and it hopes to achieve that recognition by obtaining nuclear capabilities and using its nuclear leverage to maintain its regime. Certainly, Kim Jong-un might well prefer active involvement in international discussion to being an isolationist—but no authoritarian regime can gain diplomatic recognition in the twenty-first century, least of all when most nations are seeking to scrub the world of its Cold War trappings.

The Obama administration's own pivot to Asia presented a direct threat to the DPRK. In an effort to maintain global hegemony, U.S. presence on East Asian soil is imperative if the United States is to maintain its influence in East Asia across the

continent. The U.S. military forces stationed in South Korea (USFK) seek to protect U.S. allies and indeed the entire region from North Korean provocations, thus preserving the stability of Northeast Asia. As the United States has rebalanced toward the Asia–Pacific region, particularly through the Obama administration’s so-called Pivot to Asia policy, it has been emphasizing its ability to offer a “nuclear umbrella,” which is to say an extended deterrence, such as has been in place since the mid-1900s.⁸³ By doing so, the United States not only protects its allies from regional provocations, especially at the hands of the DPRK, but also maintains its leverage over China—which threatens the American global hegemony—by making U.S. allies, especially the ROK and Japan, more dependent on the United States than on the PRC. Such a geopolitical strategy is merely a continuation of the interventionist policies that have marked the United States’ nearly 250-year history but nevertheless present a real and present danger to the DPRK.

North Korea realizes all this. Unwilling to change its mode of government, it instead has taken more forceful measures to increase or at least maintain its own national power. Ultimately, after having gained sufficient power, and thereby the acknowledgement of other sovereign states in the international realm, it even aims to reunite the two Koreas on its own terms, ending North and South Korea’s interrupted state of war. In short, the objectives of developing its own nuclear weapon for North Korea are about both the survival and protection of its regime and interests. Such an analysis of North Korea’s desires for nuclear weapons comes as no surprise, especially given the previous discussion over the South African experience. For South Africa, nuclear weapons aspirations were in part due to the need for regime survival. With the

⁸³ “Preventing a Nuclear South Korea.” *38 North*. 2016. <http://www.38north.org/2016/09/bclee091516/>.

increase in Cuban forces on the African continent and the leftist governments that had assumed power in recently independent Angola and Mozambique, South Africa sensed an imminent threat to its political survival from these communist threats. Thus, the use of nuclear weapons was used as an extreme deterrent to these potentially inimical forces, but also to induce its allies to provide support in case of attack. Either way you slice it, South Africa's justification for its nuclear weapons development arose from the insecurity that it felt in the region and the isolation created by the international sanctions arising from its apartheid regime. Such motivations are not too far off from North Korea's. North Korea views nuclear weapons as a means to protect itself from its enemy, namely the United States, who in the past has sought regime collapse and/or change. Placing North Korea on its terrorist list in the past has not been favorable to this end, stoking the flames of animosity against the United States. With the ever present U.S. presence on the Korean Peninsula and the region through its bases in both Korea and Japan, North Korea must contend with this ever present threat which only escalates with the joint military training in which the ROK and the United States engage.

Moreover, Kim Jong-un, having had ample opportunity to learn from history, has observed how nuclear armament has provided indisputable presence and power in the international domain—as it did for the United States and the USSR—as well as how nuclear disarmament has brought irrefutable disadvantages. In the aftermath of the collapse of the Soviet Union, Ukraine, possessing some of the world's largest nuclear arsenals gave up such weapons willingly. While Russia still maintained operational control of the ICBMs in Ukrainian territory, Ukraine itself had a greater capacity to handle such weapons and technology than previously thought. Nevertheless, due to

mounting international pressure from both Russia, who viewed the nuclear weapons as their own, and the United States, focused on non-proliferation and denuclearization eventually compelled Ukraine to give up and dismantle the nuclear weapons on its territory.⁸⁴ However, this begs the question over whether the events of the Russian annexation of Crimea and its military entanglements in the eastern regions would have occurred had Ukraine maintained its nuclear arsenal. From these developments, Kim Jong-un could see that the denuclearization of a country's nuclear arsenal as a result of international pressures could be detrimental down the road. Just as the Ukraine face territorial encroachment from Russia, the DPRK could face a similar fate, whether that invasion comes from South Korea and the United States or even from its perceived ally, China.

Recently the DPRK has seen Libya and Iraq give up their nuclear programs, with brutal consequences following for both. Kim Jong-un's emphasis on developing nuclear missile technology, then, might well have arisen from careful consideration of the declines of his fellow dictators, Muammar Gaddafi and Saddam Hussein, after their nations' disarmament.⁸⁵ In an effort to reduce international sanctions levied against Libya, Muammar Gaddafi began a series of negotiations that would ultimately lead to the dismantling of the country's nuclear weapons development in 2003. With the ultimatum from the United States that Libya would need to do something about its potential cache of weapons of mass destruction, Libyan officials approach its American counterparts to gain concessions regarding its sanctions. In this regard, "Libya was willing to deal because of

⁸⁴ Budjeryn.

⁸⁵ "How the Miserable Death of Moammar Gadhafi Factors into Kim Jong Un's Nuclear Ambitions." *CNBC*. 2017. <https://www.cnbc.com/2017/07/10/a-possible-reason-north-koreas-kim-wont-disarm-memories-of-gadhafi.html>.

credible diplomatic representations by the United States over the years, which convinced the Libyans that doing so was critical to achieving their strategic and domestic goals.”⁸⁶ The decision to give up Libya’s nuclear program ultimately came from Qaddafi who through measures promised by the United States would result in certain benefits for Libya and his regime, namely easing international sanctions. While Libya may not have had nuclear weapons or a program as advanced as the DPRK does today, this was a significant turn of policy for Qaddafi’s Libya.⁸⁷ Fast forwarding to the deposing and execution of Qaddafi, the issue over disarmament and the abandonment of the nuclear program brings into question, especially for the DPRK as it looks to past precedents, about whether or not disarmament and denuclearization is the best strategy for North Korea. In the face of the Arab Spring and Qaddafi’s heavy handed approach at quelling rebellion, the United States and Europe sent forces in to stop him. Had there been a nuclear arsenal at Qaddafi’s disposal, perhaps some could speculate that the United States and its allies would not have so readily intervened and allowed for the conditions to depose Qaddafi so easily. This was echoed by the DPRK’s Foreign Ministry in 2011, following the Libyan outcome, where it called Libya’s disarmament agreement “an invasion tactic to disarm the country... The Libyan crisis is teaching the international community a grave lesson.”⁸⁸ For North Korea, this lesson is that the West cannot be trusted, as the relinquishing of such weapons and measures for security would ultimately

⁸⁶ Leverett, Flynt L. “Why Libya Gave Up on the Bomb.” *Brookings*. January 2004. Retrieved from <https://www.brookings.edu/opinions/why-libya-gave-up-on-the-bomb/>

⁸⁷ Baker, Paul. “Libya as a Model for Disarmament? North Korea may See it Very Differently.” *The New York Times*. April 2018. Retrieved from <https://www.nytimes.com/2018/04/29/us/politics/bolton-libya-north-korea-trump.html>

⁸⁸ *Ibid.*

render the DPRK vulnerable to possible international intervention that could undermine the Kim regime.

This vulnerability from the dismantling of its weapons arsenal, including the nuclear ones, was evident in the case of Iraq's Saddam Hussein, prior to the disarmament decision from Qaddafi in 2003. Given the speculation of weapons of mass destruction in Iraq, the United Nations pushed for resolutions that would bring about the disarmament in Iraq of such weapons. In November 2002, the UN adopted Resolution 1441, which required the Iraqi government to begin steps toward the dismantling and disarmament of such weapons, stipulated in previous resolutions dating back to 1991, following the Persian Gulf War.⁸⁹ Despite Iraq's seeming cooperation with UN inspectors over the suspected its supposed weapons of mass destruction, the unfounded belief that Iraq was lying about its weapons cache led to the pressure from the United States and its allies on the international stage, including before the UN, which ultimately led to a unilateral declaration of war by the United States, later followed suit by its allies, against Saddam Hussein and Iraq. Such calls on Iraq included U.S. Secretary of State Colin Power, declaring before the UN Security Council, "How much longer are we willing to put up with Iraq's noncompliance before we, as a council, we, as the United Nations, say: 'Enough.'"⁹⁰ This only exacerbates the issue of credibility of the United States and its allies with respect to the DPRK. Even in the case of disarmament, if the United States has shown in the recent past that it would drum up support based on false evidence in order to invade and attack a sovereign state. This poses a very serious security threat to the very

⁸⁹ Kerr, Paul. "Looking Back: Iraq: Disarmament Without Resolution." *Arms Control Association*. January 2013. Retrieved from https://www.armscontrol.org/act/2013_01-02/Looking-Back-Iraq-Disarmament-Without-Resolution

⁹⁰ Harding, Luke. "Iraq war inquiry: timeline of conflict." *The Guardian*. July 2016. Retrieved from <https://www.theguardian.com/world/2016/jul/05/iraq-war-inquiry-timeline-of-conflict>

existence of the DPRK, whether or not the United States may actually launch an invasion of North Korea (although given the interests and geopolitical players involved in this issue, this outcome is not as likely as that of Iraq). Nevertheless, the potential for invasion remains.

The credibility of the United States comes into further question when looking at the Iran nuclear deal. Long suspected of developing a nuclear weapon, the United States, the United Kingdom, France, China, Russia, and Germany came to an agreement in 2015 on Iran's nuclear program. Under the Joint Comprehensive Plan of Action, Iran had agreed to limit certain nuclear activities while allowing international inspectors into the country in exchange for the lifting of sanctions that had crippled the country's economy.⁹¹ Despite President Obama signing the agreement, with the election of President Trump, this agreement was ripped up, at least on the American side. A deputy secretary of state under the Obama administration, Antony J. Blinken referred to this and the Libyan case with concern vis-à-vis the DPRK: "I would be very concerned that the combination of Libya and then Trump tearing up the Iran agreement sends exactly the wrong message to Kim Jong-un and undermines whatever hope exists for negotiations."⁹² The renegeing of its international agreement on Iran only goes to show Kim Jong-un that the agreements made by the United States have no actual meaning, as successive presidents could just as easily go back on their word.

That disarmament has been achieved in some cases does not give us reason to assume that other dictators would follow the same path. Rather, Kim Jong-un seems to have taken the disarmaments of Libya and Iraq as a life lesson: nuclear weapons can

⁹¹ "Iran nuclear deal: key details." *BBC News*. May 2018. Retrieved from <https://www.bbc.com/news/world-middle-east-33521655>

⁹² Baker.

assure their owners of survival. Seen from Kim's point of view, Muammar Gaddafi and Saddam Hussein faced the ends of their regimes after being rendered powerless, as it were, by the loss of their respective weapons programs. What's more, Kim might now have come to believe that "hostile" foreign forces, particularly the United States, will always seek to overthrow authoritarian regimes. Such a view would align well with North Korea's strong reaction to National Security Advisor John Bolton's recommendation of the "Libya model" for coping with North Korea. Kim Jong-un does not want to be another Muammar Gaddafi, losing first his nuclear weapons and then his regime.

II. North Korea, a "Victim" of Superpower Showdown

The DPRK's path towards nuclear development and the lack of progress towards denuclearization may not be solely within the realm of security dilemma, but due to the historical and political consequences of superpowers. Although North Korea itself has decided to travel down the path of nuclear proliferation, we cannot blame the DPRK alone for what has happened during the past decade. Many nations in Northeast Asia have experienced insecurity amid a changing geopolitical structure, particularly as a result of tensions between the United States and the Soviet Union and the United States and China. Two powers are locked in a struggle to oppose each other while containing other nations through interventionist efforts—thereby gaining power while making other states dependent on them. All this has driven North Korea, in particular, into a corner. More even than other nations in the region, the DPRK has suffered the most during this superpower showdown—which has largely overlooked this nation, spurning it for its nearly nonexistent diplomatic influence, waning economy, and other domestic struggles.

Countries that feel subordinated to the United States and China, caught up in these superpowers' increasingly forceful blandishments, might see these two nations as a greater threat to their sovereignty than North Korea could ever realistically pose. The fact that these sparring superpowers—which often play leading roles in the Security Council as it attempts to solve the problems posed by the DPRK—themselves have nuclear warheads only underscores the contradictions in the current relationship between the G-2 and North Korea. Although prone to impromptu actions, Kim Jong-un may perhaps be perceived by many nations in the region as an educated human being loath to make so self-destructive a decision as detonating a nuclear missile in sole hostility. Indeed, to these countries, the United States and China might well pose a decidedly clearer and more urgent threat.

Both the United States and the PRC seek to project greater geopolitical power in the international realm, defying each other's influence, conflicts tend toward escalation. Amid this geopolitical mire, one of the most intractable challenges the world faces as a result of this hegemonic rivalry in the Asia-Pacific region is the North Korean nuclear crisis. With regard to the United States, the defensive posturing created by the pivot to Asia has led to the belief that a nuclear DPRK provides a clear and dangerous threat that the United States could use to its advantage in maintaining a presence on the Korean peninsula and the greater Asian continent. This might be why some observers see the North Korean crisis as more opportunity for the United States than threat to it, from a macro perspective. If we disregard the less realistic scenario of the United States taking a complete hegemonic control in the East, indeed, the ideal situation for the United States is the status quo (or, preferably, an only slightly more pacified Kim regime), which offers

a pretext for the United States, in the form of the USFK, to be physically present in East Asia—ready to hold China in check. Overthrowing the North Korean regime is not only infeasible but also unnecessary for the United States. If the United States were to overthrow the regime entirely and make North Korea a democratic nation—were this even possible—then U.S. influence in the region would wane. The best situation for the United States is the status quo, which allows it to take advantage of the North Korean crisis.

The most important factor in China’s policy decisions regarding East Asia is that of “stability.” Chinese history has been a 5,000-year series of uprisings and invasions that have given rise to an almost morbid fear of instability and disorder. Thus, China is deeply averse to the instability of North Korea and the Kim regime, which threatens to create instability within China as thousands of defectors cross the Chinese–North Korean border. Such an eventuality could cripple China’s economic growth, hindering the nation in its attempts to compete in the hegemonic contest against the United States. The most ideal situation for China, from the standpoint of promoting stability on the Korean peninsula while preserving Chinese geopolitical interests, is one that maintains the Kim regime as a buffer state bereft of nuclear capability. Yet achieving a denuclearized North Korea will be extremely difficult—so the next best situation for the PRC is, as it is for the United States, the status quo. But actually acknowledging that the reason for the international community’s inability to solve the North Korean nuclear crisis largely derives from the geopolitical strategies of the United States and China on the Korean peninsula, centered on the United States –China hegemonic battle, is an entirely different matter.

Such hegemonic geopolitical strategies of both the United States and China place undue burden on the DPRK. The competition between these two superpowers could also contribute to the fact that the DPRK continues to enhance its own nuclear capabilities. While there may be some belief that China and the DPRK share a close relationship, this may not be totally true given closer scrutiny. For much of Kim Jong-un's rule, China had previously taken a more hands-off approach, leaving the United States to apply a heavy pressure on North Korea to denuclearize. It was not until the Trump summit with Kim Jong-un and the potential for a peace process that would exclude China completely that China shifted its approach. In more recent months, more bilateral meetings at various levels of the government have happened, with President Xi expected to make his first visit to Pyongyang since he assumed power. Such a shift from economic coercion to get Pyongyang to capitulate to the more traditional geostrategic approach of considering the DPRK along the lines of the "traditional friendship" and fellow socialist state provides a boon for the DPRK as well.⁹³ The strengthened relationship allows for more freedom for the DPRK to pursue its nuclear aspirations.

Yet, in reality, what is happening here is that the DPRK through its nuclear weapons development is able to extract the greatest concessions taking advantage of the hegemonic competition. Prior to 2018, Kim Jong-un had also kept his distance from China, perhaps as a means to reduce Chinese influence on his regime, as he was trying to consolidate his power. Meanwhile given the downturn in relations with China, by creating enough animosity to build confrontation with the United States through its

⁹³ Snyder, Scott. "China's Shifting Roles on the Korean Peninsula: Unintended Consequences of the Singapore Summit." *Council on Foreign Relations*. October 2018. Retrieved from <https://www.cfr.org/blog/chinas-shifting-roles-korean-peninsula-unintended-consequences-singapore-summit>

nuclear and missile testing, the DPRK chose to leave China out of its bilateral talks with the United States. By pitting the United States and China against each other, given both their leadership aspirations on both the regional and global stage, the DPRK is indeed able to get greater concessions without actually giving up anything on its end. Using the United States, the Kim was essentially able to negotiate the terms of his relationship with China, visiting with President Xi twice, and bringing China from a stance of economic blockade to reigniting the warmer relationship in the past that brought trade and other goods to the isolated country. Moreover, by increasing its threatening posture, Pyongyang has enabled the United States to change its tactics. While economic sanctions may not be lifted, “the political will to implement tough sanctions has been weakened. The thrust behind the ‘maximum pressure’ approach has been dulled considerably.”⁹⁴

III. The Power of Nuclear Weapons

In addition to the factor of the hegemonic battle for East Asia and Kim Jong-un’s decision to profit by the examples of his fellow dictators, several other factors also have helped solidify Kim Jong-un’s determination to hold on to the “inevitable choice”—or, from his standpoint, the most “effective” choice—of developing North Korean WMDs. North Korea had gone through hardship, particularly during 1990s, and experienced a near-collapse of the regime.⁹⁵ As the nation was plunged into an Arduous March during the ruling under Kim Jong-il, Kim Jong-un, through his father’s experience, was able to observe what it might be like when the regime collapses. Moreover, Kim had

⁹⁴ Marcus, Jonathan. “Trump Kim Summit: What did it actually achieve?” *BBC News*. June 2018. Retrieved from <https://www.bbc.com/news/world-us-canada-44484322>

⁹⁵ Weissmann, Jordan. “How Kim Jong Il Starved North Korea.” *The Atlantic*. 2011. <https://www.theatlantic.com/business/archive/2011/12/how-kim-jong-il-starved-north-korea/250244/>.

opportunities to learn from historical instances where nuclear armament provided indisputable presence and power in the international domain.

If we look at the history of North Korea, the nation has suffered several crises since its foundation. The Arduous March in the 1990s marked its worst period, resulting in the loss of millions of lives. This was a combination of an economic collapse and a severe famine. With the fall of the Soviet Union in 1991, one of North Korea's closest allies at the time, the North Korean economy plummeted, leading to a famine that lasted for years. A series of floods only worsened the situation. Impoverished North Korean civilians starved to death, eventually leading to a massive estimated death toll of three million. Kim Jong-il, the supreme leader at the time, faced the near collapse of his regime.⁹⁶ Such adversity in the 20th century led Kim to strongly hold on to the belief that North Korea needed to develop some type of solid measures to ensure the survival of the regime and maintain a strong nation under the ruling family. Thus, the ultimate answer was a nuclear weapon, although the nuclear program in North Korea had already "begun in late 1950s with cooperation agreements with the Soviet Union on a nuclear research program near Yongbyon."⁹⁷ Kim realized that the nation would not be able to win an economic battle against its neighbors. Also, to avoid being perceived as weak, the country used the tactic of "fear" to maintain leverage over other countries. Kim Jong-un, Kim Jong-il's successor, now believes that the development of a WMD is the only way to keep his nation relevant on the world stage and to defend the nation's peace and dignity.⁹⁸

⁹⁶ Andrew Natsios, *The Politics of Famine in North Korea* (Washington, DC: United States Institute of Peace, 1999).

⁹⁷ Mary B. Nikitin, *North Korea's Nuclear Weapons: Technical Issues* (Washington DC: Congressional Research Service, 2013).

⁹⁸ Eric Talmadge, "AP Analysis: N. Korea Seeks Leverage by Playing Nuke Card," *The Associated Press*, September 9, 2016, accessed October 2016, <http://bigstory.ap.org/article/db56253b88d8470faea458fa18ab8025/ap-analysis-n-korea-seeks-leverage->

Having learned from North Korean history and experiences, and understanding Kim Jong-un's principal objectives for nuclear weapon development programs—mainly, survival of the regime—the international effort to fight against the DPRK bears discussion.

In addition to experiencing national instability caused by the famine and deteriorating economy, North Korea also was able to look at examples of nuclear weapons not only assuring nations of their security through the measure of nuclear deterrence, but also providing those nations with enormous economic and diplomatic power in the international system. Antithetical to these countries with nuclear capability, there have been examples of nations that were once armed with nuclear weapons losing power with the disarmament. Kim Jong-un might have also speculated that there is a strong correlation between having nuclear capability and political power (table. 1), regardless of such a statement has proven to be true or not. The examples of nuclear arms race during the Cold War, particularly by the U.S, Soviet Union, and China, had delivered a subtle message that once a nation establishes and proves its nuclear capability, diplomatic acknowledgement from other nations also come with such a development. With the United States' atomic bombing of Hiroshima and Nagasaki in 1945, Japan was quick to surrender. After observing the “favorable” impacts of developing WMDs on the national power, eager to win the competition for supremacy in nuclear warfare, Soviet Union tested its first nuclear weapon in 1949, which ended a period of American atomic monopoly. Before its development of nuclear arsenals, Soviet Union was often reluctant to support North Korea's invasion of the South due to the unpreparedness of their forces. Yet with the successful nuclear detonation, the USSR was assured with confidence and

playing-nuke-card.

finally notified Kim Il-sung about his willingness to help in the fight.

Amidst the ongoing battle of ideologies of Cold War, China was able to successfully test its first nuclear weapon in 1964. China realized that the military and political power gaps between the nuclear armed and non-armed state were getting bigger particularly during the era. Such a movement came as a shock to many. There exist numerous factors in the United States' withdrawal of its forces from the Vietnam War, such as high number of U.S casualties and substantial amount of money spent for such a little progress made. Yet China's success in its nuclear detonation also contributed to the United States' nuclear deterrence in the war, whether it was for its morality of not abusing the nuclear power or was out of a fear of defeat as the aggression by the Soviet Union and China had escalated.

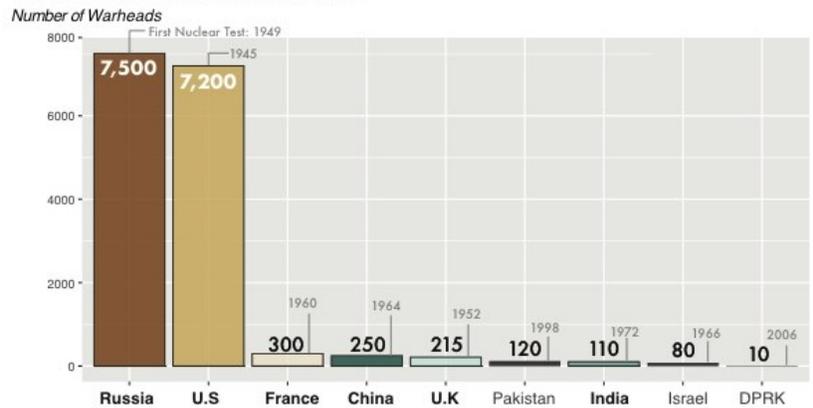
All of these examples of nuclear weapons providing authority in the global realm during the Cold War prompted the insecure Kim family to incessantly pursue the path of developing its nuclear arsenal. Interestingly, the entire picture of China going through the process of becoming a nuclear-armed state greatly resembles the current nuclear saga with North Korea. In addition to the history of nuclear armament empowering such nations mentioned above, the DPRK has also observed a few countries, such as Iraq and Libya recently going through the disarmament process as provided earlier in the chapter. The consequences for giving up the nuclear arsenals were brutal for both countries.

Moreover, in terms of dealing with the North Korean nuclear issues, Pyongyang may find the dismantlement-first mentality of certain countries in the international community quite unfair. Currently, a number of other nations in the world boast nuclear capability. According to CIA's *World Factbook*, countries having nuclear warheads

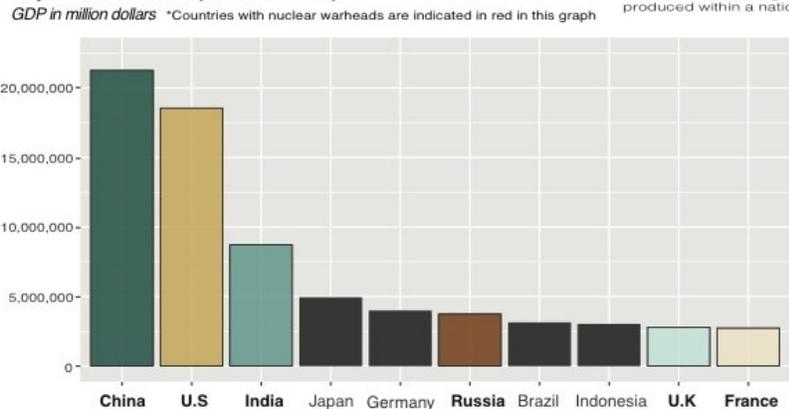
include Russia, the United States, France, China, and the United Kingdom. Interestingly, the United States and China, two of the most crucial nations in dealing with the current crisis, hold the world's greatest quantity of nuclear weapons, being ranked second and fourth, respectively. Furthermore, ironically all five permanent members of the U.N Security Council— United States, China, France, Russia, and U.K.—who take the leadership role in preventing North Korean nuclear provocations all possess nuclear warheads and also included in the top ten largest economies in terms of their GDP (Table 3). Hence, it may seem largely discriminatory to rule out DPRK from the list.

Table 3: Nuclear Weapon → Economic Power?

Countries with Nuclear Warheads



Top 10 Countries (GDP in 2016)



*GDP (purchasing power parity) compares the gross domestic product (GDP) or value of all final goods and services produced within a nation in a given year

ALL 5 PERMANENT MEMBERS OF THE U.N SECURITY COUNCIL:
 Included in both charts
 - U.S
 - China
 - France
 - Russia
 - U.K

Source: CIA The World Factbook

Why, then, has the international community been attempting to prevent North Korea from possessing nuclear capabilities? What the international community fears most is not the addition of another nuclear state to the world's roster but rather the DPRK's being that state. This is largely due to both North Korea's unique political structure, which sees a single-family control every aspect of the nation under the auspices of a hereditary authoritarian regime, and the temperament of its current leader, Kim Jong-un, who is often perceived as being "irrational" and impulsive. Kim, in his role as supreme commander, might well abuse his power to do whatever he desires and that on a whim—including through the detonation of nuclear weapons, whether across the region, the continent, or anywhere in the world should he gain the ability to do so. Thus, many see North Korea being a nuclear-armed state as a threat more than any other non-armed nations crossing that nuclear threshold.

Nevertheless, from North Korea's point of view, nuclear power might well produce political power, which might then produce economic power. As Table 1 indicates, six of the ten countries having the world's highest-ranking GDPs also boast a nuclear capability. Although such a correlation certainly is not proof of causation in either direction, possession of a nuclear arsenal might well tantalize Pyongyang with offers of global status, power, and prosperity. As the trend has shown, the development of nuclear weapons has certainly brought greater attention to North Korea, and talks of denuclearization has enabled certain concessions to be made that has long favored the North Korean regime. Despite the economic and trade sanctions placed upon the DPRK since its initial testing during the Kim Jong-il regime and after it left the NPT, the Six Party Talks allowed for agreements made on the denuclearization front to benefit North

Korea in terms of economic benefits, whether through international assistance or through the joint Kaesong Industrial Complex. While such concessions may not be made today, the power and prestige given to Kim has allowed for him to consolidate power and authority within the DPRK, as well as within the international sphere, where his threats may be deemed credible and therefore worthy of attention, even resulting in the bilateral meeting that the DPRK desire at the Singapore summit in summer 2018.

A strong correlation between nuclear capacity and political power may no longer be accurate in the twenty-first century due to the widespread non-proliferation movements across the globe; thus, the perfecting of its nuclear program may not make North Korea invincible. Yet if developing WMDs were a nation's last possible resort to both the survival and consolidating its power internationally, no one would be too hesitant to make such a decision to rely on the opportunity—especially if a country is not intimidated to make any deviant choices from the norm and unafraid of being considered “irrational and inappropriate” by many nations.

Even though it may take a few more years until the DPRK perfectly develops its nuclear missiles, we could nearly suppose that North Korea is closer to such capability, looking at the seismic yields of its previous tests, especially the sixth nuclear test. Yet, what is more important than its capability is its willingness to use such a catastrophic weapon on humanity. North Korea's relentless, vicious cycle of hostility, notwithstanding the United Nations' adoption of one of the toughest sanctions in the world, has revealed Kim Jong-un's willingness to provoke other nations with his ballistic missile tests. Yet this is not quite equivalent to his willingness to actually detonate hydrogen bombs over the Pacific Ocean. The question would be whether Kim Jong-un is “irrational” enough to

use its nuclear weapon that could destroy humankind, including his people.

Yet, we must realize that although Kim Jong-un often seems to make deranged decisions, he was and will never be suicidal. His ultimate objective in investing so much energy and resources into its nuclear weapons program is to maintain the Kim regime. If Kim Jong-un were to carry out a preemptive strike, it would, then, mean World War III, which would lead to a destruction of all, particularly more so for North Korea. Thus, as he cannot risk a war if he wants to maintain the regime, he would, then, avoid using its nuclear weapon, as he knows it would be a suicidal action if he were to use it. Therefore, we can speculate that North Korea will not start a nuclear war by using its WMDs, unless other countries strike the DPRK first. Hence, North Korean nuclear crisis is not a “real” threat in a sense that the possibility of an outbreak of World War III by the North is extremely low.

North Korea will not easily initiate a nuclear strike on its neighboring countries or the United States, as the consequences of doing so would be self-destruction. Yet, though the national and regime’s interest exists and, henceforth, we may be convinced that we are still not on the brink of nuclear war, we cannot entirely exclude the possibility of the World War III. Once North Korea feels the regime survival would not be guaranteed anymore, recognizing the near collapse, the country may, then, turn suicidal.

IV. Changing environment of nuclear weapons

Furthermore, no longer is the capability for nuclear weapons enough to function as a deterrent in today’s world. In a post-Cold War era with unipolar—or multipolar—power dynamics and the greatest technological advancements in all fields, the existence

of nuclear weapons no longer appears to automatically generate deterrence value. Hence, to prevent conflicts at all levels of armed intensity, “tailored deterrence” must be enacted according to the opposing nation’s capacity and environment. This strategy is particularly applicable to nations with less power because it allows greater flexibility while also providing more effective tools to maximize the state’s deterrent power. It permits a “David-nation” to fight countries with greater military capacity, using “smaller” yet powerful arsenals and ultimately bringing about victories. When preparing for asymmetric warfare, instead of focusing overly on the construction of large-yield strategic weapons to strike the giant’s command and control center directly, the development of better version of “slings”—in other words, tactical nuclear weapons—in a greater number can be more efficient in terms of ensuring success. Meanwhile, if a nation can have both, it would have the greatest synergy and flexibility.

Pyongyang has adopted the strategy of going both high and low in its tactics against the United States by investing greater resources into both tactical nuclear weapons and non-nuclear arms, as well as almost achieving the status of a nuclear-armed state with ICBMs that could reach the U.S. mainland. Because nuclear weapons alone cannot be a “diplomatic magic wand,” the DPRK has also been striving to challenge other states in various domains such as cyberspace.⁹⁹ North Korea’s proactive measures to develop a range of “slings” —low-yield but effective “arsenals”—is of great concern to countries such as the United States. Just as the United States’ new Nuclear Posture Review pointed out, the further development of low-yield submarine-launched ballistic missiles and sea-launched cruise missiles is necessary for the United States to reduce the possibility of using high-yield weapons at all levels of conflict. The States should

⁹⁹ Sechser and Fuhrmann, p.237

continue with its tailored deterrence strategy against North Korea so as not to be hit on its forehead. Although revamping its low-yield arsenals could possibly send unnecessary or unintended signals to other nations, doing so would be greatly helpful to combat at all levels of battle in practically any political environment. In this way, it would not remain as a Goliath with an exposed forehead, but as a giant with solid power and authority in the twenty-first century.

Conclusion

The era of nuclear deterrence is indeed different from that of the Cold War. When dealing with the denuclearization of the DPRK, it is important to note the various factors that prevent and continue to fuel the fire for the regime's desire for nuclear weapons. Nevertheless, the unpredictable provocations of the DPRK still remain a destabilizing factor not just in Northeast Asia, but around the world, given the possibility of technology leak or nuclear weapons trade. But going forward, analysts and policy makers alike will have to re-wire their thinking on approaching denuclearization.

First, the collapse of North Korea will not occur, nor will regime change. Some believe that the collapse of North Korea is near and inevitable due to the sanctions imposed by the United Nations and the DPRK's closed regime structure. Moreover, this opinion was once popular given the country's unstable economy, but also several news reports of Kim Jong-un's growing unpopularity; thus, the country is politically as well as socially insecure, lending credence to the idea that the collapse could be expected to happen soon. However, though unstable and often encountering crises, this political system has lasted nearly seventy years. Therefore, one of the points to establish in discussing the battle against North Korean nuclear proliferation is that "the collapse of the DPRK is near, so let us wait until it does collapse"—the strategy so-called "strategic patience"—is not a good solution to address this international threat. Though collapse is one possibility, it is not likely to happen in the near future. As long as its allies, most importantly China, stand behind the country and the black market continues to exist, the regime's survival is largely assured.

On this front, it is also important to note, however, that even though regime

collapse may not be a likely impending outcome, the idea of regime survival is still integral to understanding the North Korean aspirations for nuclear weapons. Regime survival may be secure more or less, but the perception of threats to regime survival remain a key motivation for such weapons. For Kim Jong-un, the arsenal of nuclear weapons provides an effective tool to create an environment that is conducive for agreements made that would benefit his regime and authority over North Korea. Furthermore, just as in the South African case, the threats to regime survival often spur on a security dilemma where the development of such weapons provides the country with an added sense of security that it otherwise would not have. This is even more poignant given the fact that North Korea and its issues over denuclearization serves as a proxy front for the hegemonic competition between China and the United States, both nuclear weapons powers with more nuclear stockpiles than that possessed by the DPRK.

Second, analysts cannot assume that Kim Jong-un will give up the DPRK's nuclear weapons without any concessions from the international community—more specifically South Korea, China, or the United States. The country and its people sacrificed a great deal to come thus far in their agenda. For a country that regards a “nuclear arsenal” as the only way to maintain its national interests and defend itself, an assumption that the country will suddenly cease its development programs is too optimistic. The ending of its nuclear weapon program out of its own will is not an option in this study. While the desire for denuclearization must happen within like it did for South Africa and Libya, such an outcome will most likely not happen. Given the past track record, North Korea has often used its nuclear weapons program to derive concessions from South Korea and the greater international community. This trend will

probably not end any time soon. Thus, for a focus on denuclearization based on North Korea just giving up and disarming its nuclear weapons is folly. Deterrence, furthermore, is not enough to coerce North Korea to give up its weapons technology.

Moreover, a military strike against North Korea to dismantle its nuclear weapons would not resolve the issue. The United Nations and the international community are seeking a peaceful way of countering North Korean aggression. Moreover, such an aggressive path taken by the United States or other influential countries might lead to World War III, which could involve nuclear weapons. Such a war would likely mean self-destruction. We have observed the same pattern from the Cold War between the United States and Soviet Union. They never fought a war against each other, as they both knew the consequences of such a war. Even as Trump and Kim escalated their war of words in the early half of 2018, tension rose to brinkmanship but never truly amounted to an all-out war. This is precisely the problem when dealing with the DPRK. Provocations in the past have led to tensions on the Korean Peninsula, especially those attacks made against South Korea. However, in more recent years, the negative consequences have been very limited and regardless of increased provocations, seen in the form of rocket and missile launches and nuclear testing, has never really truly led to the possibility of war, along the lines of the Cuban Missile Crisis. Within this idea, we come to the last and most important assumption and consideration when dealing with the North Korean nuclear crisis.

Most of the national leaders will make “rational” decisions—especially Kim Jong-un whose national and, thus, own survival is at stake. A war would only occur if both sides think that war is inevitable. However, making provocations to “provoke an

action,” such as bringing about negotiations or opening up the conversation channel, does not necessarily need an outbreak of a nuclear war. This is something that Kim Jong-un is very well-versed in. Throughout his rule, he has used his nuclear weapons development, testing, and the competition for hegemonic control in Northeast Asia to his advantage. By pushing forward on the progress of his nuclear weapons program and instigating and fueling the conflict with Donald Trump, he was able to bring about a bilateral meeting with the United States that had not happened during the Obama administration.

Furthermore, in isolating China from the equation and bringing up talks of a peace agreement without Chinese influence or intervention, Kim switched the Chinese stance towards the DPRK. In doing so, the Kim regime and the DPRK developed stronger ties that would enable it to continue its nuclear weapons aspirations. When taking all these developments into consideration, it does show the incredible statesmanship and logic used by Kim to play China and the United States against each other without truly losing too much on his own side. For Trump, Kim, and even Xi, there is a sense of rationality. Kim wants the survival of his regime but not at the expense of an all-out war. While the DPRK’s already isolated status provides Kim with greater freedoms to act more “irrationally,” Kim seems to understand that other members of the international community, specifically China and the United States who both have deep stakes in the status quo, are more restricted in their moves and thus Kim is able to manipulate this situation.

Ultimately, denuclearization on the Korean peninsula remains a key issue for the international community, especially as the provocations and testing of missiles and nuclear technology continue despite United Nations and other bilateral sanctions placed

on the country. In the approach for denuclearization, however, the traditional approach of deterrence may not be as applicable as it was in the past during the Cold War. At stake for the DPRK is perceived regime survival, especially with threatening rhetoric and posture from the United States, escalating under the presidency of Donald Trump. Yet, at the same time, there is no true political will in dismantling the nuclear program, whether by diplomacy or force, given the stake that both China and the United States have in creating a tense situation that benefits both their foreign policy interests and aims in the region. Furthermore, nuclear deterrence just does not have the same effect as between a non-nuclear state and a nuclear one. Thus, the environment where nuclear weapons serves as coercive diplomacy is less effective with North Korea. Only by taking all these various elements into consideration can there be more impact when approaching the issue of North Korean denuclearization. Thus far, much of the policies towards North Korea and denuclearization have failed to consider these elements, which has not surprisingly led to impasse.

Deterrence certainly has not created a safer international community, where the threat of nuclear weapons by countries such as the United States and China has hindered other states to shy away from the development of nuclear weapons. In fact, the opposite seems true. The need for nuclear weapons arises from the security dilemma. For South Africa, the need for nuclear weapons was partly due to its perceived threat from Soviet forces in new governments in southern Africa. But the use of nuclear weapons provided South Africa with a key bargaining tool for when they would need international assistance in the face of an imminent attack against the country. Nuclear weapons themselves would have been overkill in such a conflict, but due to the isolation

experienced by the apartheid regime, nuclear weapons provided an impetus for South Africa's Western allies to come to its aid when its regime survival should be threatened. So it comes as no surprise that nuclear weapons have served as a tool in diplomacy, just not really the way Schelling had envisioned. Given the isolation also experienced by the DPRK, Kim Jong-un has no other recourse as effective as the development of nuclear weapons. While such weapons would certainly cause damage and could initiate a nuclear war, the possession of such weapons goes far beyond just damage against an adversary. It is a tool that the Kim regime is able to employ in order to gain concessions out of the international community, whether through the United States or China, without having to give too much up themselves.

Furthermore, nuclear deterrence in today's modern politics seems anachronistic all for the reasons based upon the logical and rational thought process of leaders of developed countries. As rational thinkers, they would not jeopardize their country's prosperity and stability by engaging with the DPRK in a nuclear war. This causes a severe problem when it comes to the efficacy of deterrence. Without the credibility of action, in this case the use of a nuclear weapon, deterrence just does not work. Knowing that such leaders would not actually use nuclear weapons creates a situation akin to appeasement where rogue states like the DPRK are able to push the boundaries further without any negative repercussions. And history has shown that this is true. Throughout much of 2016 and 2017, the DPRK has tested rockets, missiles, and nuclear material, all against UNSC resolutions barring such actions. Yet, nothing really has been done other than place more sanctions against the country. Having lived through years of such sanctions, the DPRK has not really been affected by such punishments. In fact, North

Korea has only increased its provocations, a similar story to what happened in South Africa after its embargo. Thus, this goes to show that when backed into a corner, states considering their limited options may go for the most extreme to gain the most, especially due to the lack of credibility of other nuclear powers to actually use such technology against them.

Deterrence also fails to bring about the results that are desired, i.e. the denuclearization of the Korean peninsula because of past experiences of other countries that have given up their nuclear arsenals. Ukraine, although it had one of the largest nuclear weapons in the world at the time of its disarmament, willingly gave up its nuclear stockpiles due to concessions and agreements made to them by the United States and Russia. But decades after such a decision, Russia invaded Ukraine, annexing Crimea and occupying parts of eastern Ukraine. Moreover, Libya also decided to give up its nuclear weapons program in 2003, but by 2011, United States and European forces intervened in the internal affairs of Libya, as the Arab Spring took hold in the country with protests against Qaddafi mounted. Soon thereafter, Qaddafi was found, arrested, humiliated, and ultimately executed. These two cases of denuclearization and disarmament does not present a rosy picture for the Kim regime. In fact, there serve as warnings against disarmament. Had there still been a sizeable arsenal in Ukraine, perhaps Russia would not have been so eager to invade and infringe upon Ukraine's sovereignty. In the case of the DPRK, questions arise over whether the lack of nuclear weapons would allow for an opportunity for South Korea and/or the United States to invade North Korea to unite it under the South Korean, U.S. allied banner. The consequences of Qaddafi's decision to end Libya's nuclear program also have important precedents for Kim himself. The

denuclearization of North Korea could lead to a similar situation, where if the international community viewed Kim's methods of governance going against their ideas and values, they could just as easily intervene where Kim could suffer from the same demise as Qaddafi. Thus, historical precedents show that denuclearization and disarmament would not be the smart option, not only for the regime but also for Kim himself.

This lack of credibility regarding international agreements made upon denuclearization and disarmament is certain a logical conclusion that could be made by the Kim regime. Again, the U.S. experience with nuclear agreements demonstrates that the United States cannot be trusted. Despite signing the Iran nuclear deal under the Obama administration, President Trump reneged on the U.S. promises, where Iran still maintained that it would uphold its end of the bargain but the United States did not and has the power to also punish the other signatories that want to uphold the agreement by closing American financial services to them. Thus, if we consider Kim as a rational leader, there is no reason for him to want to denuclearize. On the contrary, he seems to be astutely maneuvering the power politics between China and the United States to gain concessions that he otherwise would not be able to do so without the presence of nuclear weapons.

This study has gone as far to show the complexities of the North Korean nuclear crisis, comparing the experiences of other denuclearized states of South Africa, Libya, and Ukraine in informing the possible motivations for Kim Jong-un. While we can speculate on the many different motivations that create the need for nuclear weapons, one motivation does remain clear – regime survival. The one thing that Kim is focused on is

perpetuating his rule over the DPRK, the way he wants. The development of his nuclear program is enabling him to do so. The motivations of other nuclear states have also indicated regime survival, especially in the face of external threats, as a primary motivator. Going forward, however, is the question of how to mitigate the threats and concerns that motivate the DPRK from abandoning and dismantling its nuclear weapons and program. The United States will never be considered an ally or friend, so attacking this issue would be harder. But there are other modes that could be useful.

In this line of thinking, further research could be done on whether friendly diplomacy is more useful in getting other countries to de-escalate and disarm, especially with regard to nuclear weapons. Sanctions and condemnation against the DPRK's nuclear program have not amounted to much. Moreover, when looking at the development of nuclear weapons programs, such as that in Libya and South Africa, it becomes clear that international isolation prompted and sometimes even accelerated these countries' nuclear weapons programs. Today, there is no country more isolated than the DPRK. Sticks have been used in dealing with the DPRK, and perhaps more carrots should be used. As the saying goes, you can catch more flies with honey than with vinegar.

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Appendix C: List of Abbreviations

- DPRK: Democratic People's Republic of Korea
- ICBM: Intercontinental Ballistic Missile
- KOSPI: Korean Composite Stock Price Indexes
- KPA: Korean People's Army
- NPT: Non-Proliferation Treaty
- PRC: People's Republic of China
- ROK: Republic of Korea
- UN: United Nations
- UNSC: United Nations Security Council
- USFK: United States Forces Korea
- USSR: Union of Soviet Socialist Republics
- WMD: Weapon of Mass Destruction

Appendix D: Curriculum Vitae

Seulah Gianna Song

Email: giannasong@gmail.com

EDUCATION

Johns Hopkins University

Master of Arts in Government, Security Studies

Washington, DC

Dec 2018

- Related Coursework: North Korea: Policymaking Primer, Deterrence in the 21st Century, Economic Growth: The Politics of Development in Asia, Africa and Beyond, NGOs in Development and Global Policy-Making, Grand Strategy: Interests, Choices, Decisions, Consequences, Introduction to Global Security Studies, Statistics and Political Analysis, Government & Politics, Global Political Economy, Data Visualization, Research & Thesis

New York University

Bachelor of Arts in Economics, Minor in Business Studies

New York, NY

May 2016

PROFESSIONAL EXPERIENCE

Permanent Mission of the Republic of Korea to the United Nations

Political Analyst

New York, NY

May 2018 – Present

- Monitor political developments in Northeast, Southeast, and South Asia
- Provide analysis and recommendations to the government regarding issues related to the regions covered
- Attend Security Council meetings and follow media stakeouts and press releases. Provide daily briefings and reports to the headquarter in Korea
- Closely monitor developments in the United States and their implications and impact on the U.S. foreign policy
- Participate in roundtable discussions and conferences and engage with diplomatic community in New York

East-West Center

Research Intern

Washington, DC

March 2018 – May 2018

- Wrote articles for publication on the political developments in the Asia Pacific and the U.S.-Asia relations for the Asia Pacific Bulletin(APB) website
- Contributed research and drafted Asia Matters for America/America Matters for Asia (2018), a flagship project of the East-West Center that focuses on delivering information and analysis on the US-Indo-Pacific at the national and sub-national levels

The Korea Society

Research Assistant to the President of The Korea Society

New York, NY

May 2017 – Aug 2017

- Assisted with preparations for the president's (Thomas Byrne) media appearances, speeches, and press statements
- Conducted research on policy and corporate affairs related to the Asia-Pacific
- Drafted article submissions to major media outlets and think tanks on the topics of "authoritarian regimes and the possibility of internal revolts in North Korea, China, and Vietnam" and "South Korean economic growth outlook"
- Attended events and roundtable discussions as a rapporteur and compiled reports and PowerPoints on "East-Asia policy, economics, and geopolitical strategy" for the president

Permanent Mission of the Republic of Korea to the United Nations

5th Committee Intern

New York, NY

Jul 2016 – Aug 2016

- Assisted the 5th Committee counselor with his research on the "Staff Demographics at the UN Secretariat" and "HR Management Reform under Secretary General, Ban Ki-moon."

- Drafted reports in regards to the administrative/budgetary agendas of 5th committee from the perspective of Republic of Korea

Pacific Forum CSIS

Honolulu, HI

Summer Research Assistant

Jul 2015 – Aug 2015

- Assisted the Executive Director, Brad Glosserman, with his research on the ROK-Japan relations (Expanded research from his book, *The Japan-South Korea Identity Clash: East Asian Security and the United States*)
- Conducted an additional research and wrote “*The Impact of South Korean Social Homogeneity on the ROK-Japan Relations*”
- Helped coordinate the Honolulu International Forum seminars and attended the events to have an in-depth understanding of foreign policy issues in East Asia

Emerging Leaders Program, Pacific Forum CSIS

Honolulu, HI

Member of Korea Emerging Leaders Program

Jul 2015 – Aug 2015

- Participated in the US-ROK-Japan Trilateral Strategic Dialogue & US-ROK Bilateral Strategic Dialogue held in Lahaina, Maui in July
- Publication: “*Struggling with the Gray Zone: Trilateral Cooperation to Strengthen Deterrence in Northeast Asia,*” *Issues and Insights Vol.15 – No.13, October 2015s*

ADDITIONAL INFORMATION

- **Skills:** Microsoft Office Suite (Word, Excel, PowerPoint), Adobe Illustrator, Adobe Photoshop, InDesign, HTML, CSS, JavaScript, R, Tableau
- **Language Proficiencies:** Fluent in English and Korean