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IS NUCLEAR DOMINO IN NORTHEAST ASIA REAL AND INEVITABLE?

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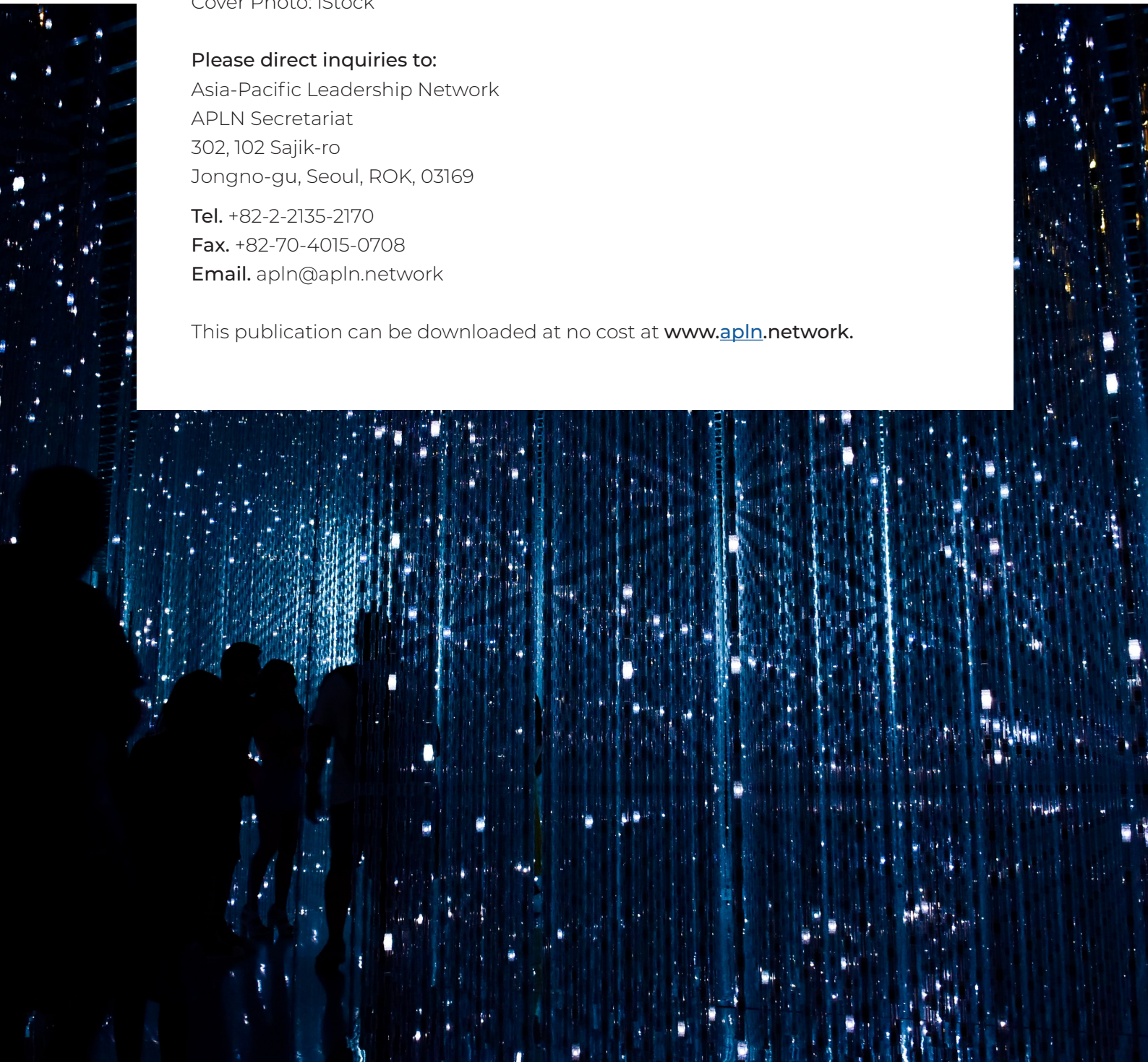
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Section 1.

INTRODUCTION

“How Dark Might East Asia’s Nuclear Future Be?” This is the title of a working paper on nuclear domino in Northeast Asia published by the Nonproliferation Policy Education Center in 2016. Its editor Henry Sokolsky sent a chilling message: “Long considered unlikely, the prospect of South Korea and Japan getting nuclear weapons and China and North Korea significantly ramping up their arsenals has become the next big worry.”¹ In this regional nuclear equation, the key factor is the DPRK’s nuclear rush that can easily trigger a nuclear domino in Northeast Asia by driving Japan and South Korea to go nuclear.

Japan and South Korea have an enormous latency to turn their civilian nuclear programs into nuclear armament. They possess both fissile materials that can be enhanced to weapons-grade and the technological capabilities to do so.

Both Japan and South Korea have an enormous latency to turn their civilian nuclear programs into nuclear armament. They possess both fissile materials that can be enhanced to weapons-grade and the technological capabilities to do so. The nuclear domino thesis in Northeast Asia became more pronounced as Donald Trump hinted at the inevitability and possibility of Japan and South Korea going nuclear in his interview with the New York Times on March 27, 2016.²

Five years after Sokolski’s warning, the nuclear situation in the region seems to have worsened. In 2017, the DPRK undertook its sixth nuclear testing and test-fired 15 ballistic missiles, including Hwasung-15, an intercontinental ballistic missile (ICBM) aimed at the U.S. mainland. President Donald Trump responded to the moves by threatening to totally destroy the North at his U.N. General Assembly speech in September 2017.

1 Henry Sokolski, ed. *How Dark Might East Asia’s Nuclear Future Be?* (Washington, D.C.: Nonproliferation Policy Education Center, August 26, 2016), Working Paper 1601: 1. <http://www.npolicy.org/article.php?aid=1322&rt=&key=Ian%20Easton&sec=article&author=>

2 “Transcript: Donald Trump Expounds on His Foreign Policy Views,” *New York Times*, March 26, 2016, <https://www.nytimes.com/2016/03/27/us/politics/donald-trump-transcript.html>

According to Bob Woodward's book, *Rage*, Trump deliberated a nuclear strike against the DPRK.³ Crisis escalation was averted by a series of diplomatic developments, two inter-Korean summits and the first DPRK-U.S. Singapore summit in June 2018. But the failure of the second U.S.-DPRK Hanoi summit in February 2019 has led to a protracted stalemate. The unresolved DPRK nuclear quagmire continues to haunt South Korea and Japan.

The ROK government has been prudent in favoring a negotiated settlement through diplomacy, but conservative politicians and pundits have been advocating the development and possession of independent nuclear weapons. For them, the logic of 'nuclear for nuclear' is the only viable way to cope with DPRK threats. Otherwise, they argue that Seoul should seek the re-deployment of American tactical nuclear weapons and/or NATO type nuclear sharing. Public opinion in South Korea rather strongly supports the pursuit of nuclear weapons. Tokyo's reactions have been equally worrisome. Departing from the long-time tradition of 'nuclear taboo,' some Japanese politicians and opinion leaders began to raise the possibility of nuclear options. A dangerous vicious cycle of the nuclear dominoes in Northeast Asia seems on the horizon.

This essay aims at unraveling the dynamic nature of the nuclear domino phenomenon in Northeast Asia primarily focusing on the DPRK, South Korea, and Japan. The first section examines the DPRK's nuclear/missile threats as its trigger. The second looks into South Korea's public debates on nuclear options ranging from independent nuclear weapons development to the re-transfer of American tactical nuclear weapons and the NATO style nuclear sharing. Public opinion on nuclear weapons will also be analyzed. The third section will trace how developments on the Korean peninsula have affected Japan's public debates on nuclear weapons and underlying public opinion. Finally, it will examine whether the nuclear domino phenomenon in Northeast Asia is real and suggest ways to prevent the advent of nuclear entanglement.

³ Bob Woodward, *Rage* (New York: Simon & Schuster, 2020): 71.

Section 2.

ASSESSING DPRK NUCLEAR AND MISSILE THREATS

Of five legitimate nuclear weapons' states, three (the United States, Russia, and China) are competing in Northeast Asia, but an amazing strategic stability has prevailed in the region since 1970 that can be attributed to the combination of nuclear deterrence, the fear of mutually assured destruction, and the Non-proliferation Treaty (NPT) regime. Nonetheless, the DPRK's nuclear ambition has trembled the region's strategic landscape. After the first successful test launching of an ICBM in November 2017, Pyongyang officially declared that it has completed its nuclear forces.

Since the second nuclear crisis in 2002, the DPRK has made steady progress in its nuclear weapons capability. It now has nuclear facilities, fissile materials (both plutonium and highly enriched uranium), and 30 to 60 warheads. It is estimated that the DPRK can increase its nuclear arsenal by six to twelve warheads per year.

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⁴ As to the overview of the DPRK's nuclear capabilities, please refer to Bruce W. Bennett, Kang Choi, Myong-Hyun Go, Bruce E. Bechtol, Jr., Jiyoung Park, Bruce Klingner, Du-Hyeogn Cha, Countering the Risks of North Korean Nuclear Weapons (Santa Monica: Rand/Asan, 2021) <https://www.rand.org/pubs/perspectives/PEA1015-1.html>; Open Nuclear Network, "Analysis of the results of the 8th Congress of the Workers' Party of Korea: (February 021)" <https://www.oneearthfuture.org/program/open-nuclear-network/publications/8th-congress-workers%E2%80%99-party-korea-1>; Patrick Cronin, Fear and Insecurity: Addressing North Korean Threat Perception (Washington, D.C.: Hudson Institute, 2021) <https://www.hudson.org/research/16752-fear-and-insecurity-addressing-north-korean-threat-perceptions>; Peter Hayes and Chung-in Moon (eds.), "Special Issue: Breaking the Nuclear Deadlock in Northeast Asia: Rethinking the North Korean Nuclear Crisis," Korea Observer Vol. 47, No. 4 (Winter 2016); Shane Smith, "Alternative North Korean Nuclear Futures," in Sokolski, op. cit.: 41-50.

It is estimated that the DPRK can increase its nuclear arsenal by six to twelve warheads per year.⁵

Its delivery capabilities have also remarkably improved. North Korea now possesses twenty types of short (Scud-B and C, KN-23) and intermediate ballistic missiles (Nodong) and ICBM (Hwasong-15) as well as SLBM (Bukguksong series), of which fifteen can carry nuclear warheads.⁶ The DPRK is also known to have miniaturized its warheads, making them smaller and lighter. Pyongyang has conducted six rounds of nuclear testing, culminating in the successful testing of a hydrogen bomb on September 3, 2017.

The NPT regime does not allow the recognition of the DPRK as a nuclear weapons state, but the indicators above exemplify that it has completed the process of nuclear weaponization. Kim Jong Un's remarks at the Eighth Party Congress of the Korea Workers' Party (KWP) on January 12, 2021, alarmed the world. He stated that the DPRK has successfully developed tactical nuclear weapons by mastering their miniaturization and standardization. He also added that it has acquired the largest hydrogen bombs. In addition, extra-large scale multiple rocket launchers, news cruise missiles (KN-23), and multiple independently retrievable vehicles (MIRV) were introduced. It is worthy to note in Kim's remarks that the DPRK will be developing hypersonic gliding vehicles, military reconnaissance satellites, and nuclear-powered submarines. These cutting-edge weapons might be on Kim's wish list to balance new weapons procurements in the United States and South Korea.⁷

Equally troublesome is the DPRK's assertive behavior since the failed Hanoi summit. Instead of testing strategic weapons that threaten the U.S. mainland, the DPRK test fired short-range missiles such as KN-23 (range 600 km, equivalent of Russian Iskander), KN-24 (range 400 km, equivalent of ATAKIM), KN-25 (400 km, mega caliber multiple launchers), and KN-09 (250 km, large caliber multiple launcher) sixteen times between May 2019 and August 2020, all of which aim at South Korea and American military bases there.

⁵ Siegfried Hecker estimates six per year, whereas the RAND Corporation/Asan report twelve per year. See 38 North, "Estimating North Korea's Nuclear Stockpiles: An Interview With Siegfried Hecker," April 30, 2021. https://www.38north.org/2021/04/estimating-north-koreas-nuclear-stockpiles-an-interview-with-siegfried-hecker/?utm_source=Stimson+Center&utm_campaign=6b91e4ff50-38N_RSS_AUTOMATED&utm_medium=email&utm_term=0_15c3e20f70-6b91e4ff50-46310277&mc_cid=6b91e4ff50&mc_eid=ed6f75f703; RAND/Asan, op.cit.: 36-38.

⁶ See RAND/Asan Report, op. cit. p.30, table 3.1.; Missile Defense Project, "Missiles of North Korea," Missile Threat, Center for Strategic and International Studies, June 14, 2018, last modified November 30, 2020, <https://missilethreat.csis.org/country/dprk/>

⁷ Jina Kim, "Analysis of the 8th Party Congress and Implications for National Security and Foreign Affairs," Korea Institute of Defense Analysis, Kugbang Rondon No. 1835 (21-3), January 19, 2021 (in Korean). <https://www.kida.re.kr/frt/board/frtNormalBoardDetail.do?sidx=382&idx=1895&depth=3&lang=kr>

The DPRK also test fired the submarine-launched ballistic missile (SLBM) Bukguksong-3 on the barge in October 2019 and Bukguksong-4 (2,000 km) in October 2020 and displayed Bukguksong-5 (3,000 km) at the military parade in January 2021. At a military parade in October, 2020, Hwasong-16 (range 13,000km) was also shown.⁸

Given the mix of new strategic and tactical weapons, Pyongyang's intention seems twofold. Whereas Hwasong-15 and 16 are for securing a minimum deterrence through second strike capability targeted at the U.S. mainland, short-range ballistic and cruise missiles and SLBMs are designed for a tactical deterrence by denial against South Korean forces, American forces in Japan and South Korea, and U.S. reinforcement forces.⁹ Furthermore, Kim Jong Un's instruction at the Eighth Party Congress to make tactical nuclear weapons operational has alerted Japan and South Korea. Indeed, North Korea's nuclear/missile capabilities are currently posing 'existential' threats to Japan and South Korea.

8 Jungsup Kim, "Assessing North Korea's Nuclear and Missile Threats: An Update," a paper presented at an international joint seminar on "Assessing Northeast Asia Nuclear Domino," the APLN-Sejong Institute, May 14, 2021 (in Korean).

9 See Jungsup Kim, *Ibid*; Kim's analysis of the DPRK's motives is sharply contrasted with that of the RAND/Asan report which cites the preservation of Kim Jong Un's regime, achieving Korean unification in its terms, and seeking a new power status in the region as principal motives behind the DPRK's pursuit of nuclear weapons. See RAND/Asan Report, *op. cit*: 3-4. But this premise seems troublesome at least on two accounts. First, the DPRK is the monolithic Suryong (Leaders) system and, thus, theoretically speaking, its leadership is not concerned about internal challenges to regime security. Second, the DPRK recently amended the preamble of KWP's by-law regarding the goal of unifying the South under its terms, implying the abandonment of its united front strategy.

Section 3.

SOUTH KOREA'S RESPONSES: SEEK INDEPENDENT NUCLEAR ARMAMENT

Facing nuclear/missile threats from the DPRK, the South Korean government has taken a firm position. At a National Assembly speech on November 1, 2017, President Moon Jae-in assured that South Korea will not seek nuclear weapons not only because the United States is providing a credible nuclear umbrella to the South,¹⁰ but also because Seoul's pursuit of a nuclear path can invalidate the 1992 Joint Declaration on the Denuclearization of the Korean Peninsula as well as derail its efforts to denuclearize the Korean peninsula peacefully.¹¹

Defying the government position, however, conservative politicians and opinion leaders have raised strong voices in favor of independent nuclear weapons.¹² There are two schools, teleological and instrumentalist. The teleological school emphasizes 'nuclear sovereignty' based on the logic of 'nuclear for nuclear' and seeks nuclear armament regardless of American stance. One of its proponents argues that "countries without nuclear weapons are not truly independent one"¹³ and nuclear weapons are the only way to cope with the DPRK's nuclear threats and to survive the harsh Northeast Asia's strategic reality.

10 Since the establishment of the ROK-U.S. Combined Forces Command in 1978, the United States has affirmed extended deterrence to South Korea. After the DPRK undertook its first nuclear test on October 9, 2006, then Defense Secretary Donald Rumsfeld reassured extended deterrence including its nuclear umbrella to South Korea. At present, the ROK and the United States jointly operate the Extended Deterrence Strategy and Consultation Group through which convention and nuclear extended deterrence is discussed.

11 On Moon Jae-in's Korea Peace Initiative, please refer to Chung-in Moon and John Delury (eds.), *Bridging the Divide: Moon Jae-in's Korea Peace Initiative* (Seoul: Yonsei University Press, 2019).

12 "Voices demanding nuclear armament are on the rise," BBC News Korea, September 26, 2017. <https://www.bbc.com/korean/news-41377195> (in Korean); Robert Einhorn and Duyeon Kim, "Will South Korea Go Nuclear?," *The Bulletin of Concerned Nuclear Scientists*, August 2016, <https://thebulletin.org/2016/08/will-south-korea-go-nuclear/>

13 Gap-je Cho, "Two Reports' Shock: American experts' assessment of nuclear armament capabilities in Japan and South Korea," *Monthly Chosun*, May 2016 (in Korean).

<http://m.monthly.chosun.com/client/news/viw.asp?nNewsNumb=201605100035&form=MY01SV&OCID=MY01SV>

For them, nuclear weapons are the end in itself.¹⁴ For the instrumentalist school, however, an independent nuclear armament is conditional. If nuclear deterrence is credibly secured by an American nuclear umbrella through either the re-deployment of its tactical nuclear weapons or a NATO-style nuclear sharing, there is no need for an independent nuclear path. If not, they argue, South Korea should go nuclear independently.¹⁵ The teleological school seems a minority, whereas the instrumentalist school a majority. Nevertheless, both schools advocate South Korea's nuclear latency, posing a serious concern.



14 Mong-jun Chung, "In front of North Korean nuclear threat, what can we do?" <http://blog.naver.com/globalmj/220613981473/>; Interview with Cho Gapje, "Nuclear for nuclear is the best deterrence, balance of terror should be realized," Kim Jong-bae's program, TBS, February 23, 2016. http://tbs.seoul.kr/news/newsView.do?seq_800=10137770&typ_800=12; "Tae-woo Kim argues 'nuclear armament for self-defense should be open'" Yonhap News, February 1, 2017. <https://www.yna.co.kr/view/AKR20170215054700004>; Dae-jung Kim, "South Korea's nuclear weapons, it is well worthy of debating," Chosun Ilbo, February 7, 2011 (all in Korean). https://www.chosun.com/site/data/html_dir/2011/02/07/2011020701994.html?form=MY01SV&OCID=MY01SV

15 Nakgyu Yang, "Redeployment of tactical nuclear weapons revisited," Asia Gyeongje, September 19, 2020 (in Korean). <https://www.asiae.co.kr/article/2020091810214441111>; Eun-cheol Lee, "Cho Kyung-tae's nuclear armament proposal is drawing attention," Busan Ilbo, July 31, 2019 (in Korean). <http://www.busan.com/view/busan/view.php?code=2019073119381781177>

Politicians from the conservative opposition party constitute the core of the teleological school. Won Yoo-cheol, then floor leader of the ruling Liberty Korea Party, the staunchest advocate of nuclear weapons development, argued that “we cannot borrow an umbrella from a neighbor every time it rains. We need to have a rain coat and wear it ourselves.”¹⁶ He even suggested that South Korea should withdraw from the NPT to guard our own destiny. After the Moon Jae-in government was inaugurated in May 2017, a number of leading conservative opposition politicians followed his suit. Kim Jong-in, then leader of the conservative opposition People Power Party stated that “unless North Korea abandons its nuclear weapons, we should think about having nuclear armament.”¹⁷ Oh Se-hoon, another opposition party leader and currently Seoul City Mayor, also echoed a view that “unless we take the extreme measures [i.e., nuclear armament], the North will not change.”¹⁸ This is a general sentiment among conservative politicians.

Some conservative opinion leaders have been campaigning the pro-nuclear posture. For example, a staunch conservative hardliner Song Dae-sung argues that “without nuclear weapons, we will become a slave of North Korean nuclear. Nuclear balance of terror is the only way to deal with North Korea.”¹⁹ Chosun Ilbo, the leading conservative daily, has been openly supporting nuclear armament through its editorials. Kim Dae-jung, its senior editorial advisor, went further by claiming the DPRK nuclear threat will eventually lead to Japan’s nuclear armament, leaving South Korea as the only country without nukes in the region. That will be a nightmarish scenario. According to his line of reasoning, South Korea’s internal debates on the development and possession of nuclear weapons will send a warning to China, while serving as an effective card to resolve the DPRK nuclear problem. He has then been proposing to place the nuclear armament issue as a major agenda for the general election and the presidential election.²⁰

16 Quoted from Henry Sokolski, ed. *How Dark Might East Asia’s Nuclear Future Be?* (Washington, D.C.: Nonproliferational Education Center, August 26, 2016), Working Paper 1601, p. 88. <http://www.npolicy.org/article.php?aid=1322&rt=&key=Ian%20Easton&sec=article&author=>

17 Il-hoon Hyun, “Kim Jong-in, ‘if North Korea does not give up nuclear, we should deliberate on nuclear armament,’” Joongang Ilbo, November 25, 2020 (in Korean). <https://news.joins.com/article/23929344>

18 Min-woo Kim, “Oh Se-hoon who joins nuclear armament says ‘unless we take an extreme measure, the North will not change,’” Chosun Biz, June 19, 2020. https://biz.chosun.com/site/data/html_dir/2020/06/19/2020061901282.html

19 Jin-yeo Park, “Report on the publication ceremony of Dr. Dae-sung Song’s Book, ‘We should also have nuclear weapons,’” Dailian, August 24, 2016 (in Korean). <https://www.dailian.co.kr/news/view/586835/?sc=naver>

20 Dae-jung Kim, “We should have nuclear weapons,” Chosun Ilbo, January 29, 2019 (in Korean). https://www.chosun.com/site/data/html_dir/2019/01/28/2019012802626.html

Jeong-hoon Lee, a senior journalist with Donga Daily, concurs with him, but points out that nuclear weapons are inconceivable without nuclear sovereignty that in turn requires an autonomy from the United States with regard to uranium enrichment and reprocessing of spent fuel rods.²¹

Even some anti-nuke liberals have changed their stance. After the DPRK's sixth nuclear testing in 2017, Bae Myong-bok, a well-known liberal columnist, advocated the nuclear path as a useful leverage to denuclearize the DPRK.²² Another liberal, Chung Seong-jang, a leading North Korean specialist, also claimed that South Korea should have its own nuclear weapons to create a balance of power on the Korean peninsula and in the region. The DPRK will not give up its nuclear weapons, and a nuclear balance of power is the only way to cope with the DPRK nuke. He contended that South Korea should reemerge as a credible middle power with nuclear weapons that can prevent the outbreak of war, leading to a peninsular and regional peace through a balance of power.²³ Worrisome is that debates on nuclear weapons are no longer considered taboo. It is tantamount to opening the Pandora's Box.

Apart from the DPRK's nuclear and missile threats, there are several other factors that drive South Korea's public debates on nuclear armament. The growing skepticism of the U.S. extended nuclear deterrence mattered.

Apart from the DPRK's nuclear and missile threats, there are several other factors that drive South Korea's public debates on nuclear armament. The growing skepticism of the U.S. extended nuclear deterrence mattered. Chung Mong-joon, an influential politician and the founder of the Asan Institute for Policy Studies, coined the term 'torn nuclear umbrella' to describe his lack of trust in an American nuclear umbrella. He also suspected that the United States will not sacrifice Los Angeles for Seoul.²⁴ The skepticism has intensified as a result of Trump's rhetoric and policy. During his presidential campaign, he suggested he would allow Japan and South Korea to go nuclear.

21 Seoul's hard lobbying notwithstanding, Washington currently does not allow the South Korea's back end of nuclear fuel cycle in accordance with the ROK-U.S. Civil Atomic Energy Cooperation Accord. See Jeong-hoon Lee, *South Korea's Nuclear Sovereignty* (Seoul: Geulmadang, 2013) (in Korean).

22 Myong-bok Bae, "Korean Peninsula peace through nuclear balance," *JoongAng Ilbo*, September 17, 2019 (in Korean). <https://news.joins.com/article/23578701>

23 Seong-jang Chung, "Trump's redeployment of tactical nuclear weapons vs. South Korea's independent nuclear armament," *Ajungeongje*, March 6, 2017. <https://www.ajunews.com/view/20170305161349769>

24 Mong-jun Chung, op. cit.

And his transactional handling of the alliance after the election heightened concerns in Seoul and Tokyo that he might withdraw American forces any time. The nuclear option was raised as a fallback strategy in the absence of American conventional and nuclear deterrence.²⁵ Such thinking is not new. President Park Chung-hee sought a nuclear weapons development when the Nixon administration decided to reduce and even withdraw American forces from South Korea in the early 1970s. An argument that alliance is more important than non-proliferation mandate and that Japan and South Korea should be allowed to seek nuclear weapons as a way of countering China threats has also contributed to precipitating the public debates.²⁶

Equally critical is the reassessment of South Korea's nuclear weapons capability.²⁷ In 2016, Charles Ferguson, then president of the Federation of American Scientists, estimated that South Korea has up to 4330 bombs' worth of plutonium at the Wolsong site, assuming a conservative estimate of about 6 kg plutonium for a first-generation fission device.²⁸ Suh Kune-yul, a controversial professor of nuclear engineering at Seoul National University, went further by stating that "South Korea has plutonium enough to produce 5,000 nuclear warheads of 100 kiloton. If we (South Korea) decide to stand on our own feet and put our resources together, we can build nuclear weapons in six months with the investment of one billion dollars."²⁹ There is a wishful thinking that South Korea can follow the Israeli path. Being a democracy, South Korea can persuade the United States and international society to allow its nuclear armament through active lobbying. Such false anticipation is widely shared among them.³⁰

25 Sang-eun Bae, "Former Foreign Minister Min-soon Song says 'withdrawal of American forces will heighten demands for independent nuclear armament,'" News 1, December 6, 2019 (in Korean). <https://www.news1.kr/articles/?3787092>; Chosun Ilbo Editorial, "if South Korea is armed with nuclear weapons, there is no need for American forces," Chosun Ilbo, November 13, 2019 (in Korean). https://www.chosun.com/site/data/html_dir/2019/11/12/2019111203527.html?form=MY01SV&OCID=MY01SV

26 Elbridge Colby, "Choose Geopolitics Over Nonproliferation." National Interest. (February 28, 2014). <https://nationalinterest.org/commentary/choose-geopolitics-over-nonproliferation-9969>

27 See Gap-je Cho, "Two Reports' Shock: American experts' assessment..." op. cit.

28 Charles D. Ferguson, "How South Korea Could Acquire and Deploy Nuclear Weapons," in Henry Sokolski (ed.), op.cit., p.70. An irony here is that Ferguson gave the figures in order to warn South Korea's moves toward nuclear armament, but conservative hardliners interpreted them in an opposite way.

29 Hee-seok Park, "Interview with Kune-yul Suh, who says 'we can have nuclear weapons in six months if we invest one trillion won...'" Monthly Chosun, September 27, 2017 (in Korean). <http://m.pub.chosun.com//client/news/viw.asp?cate=C01&nNewsNumb=20170926241&nidx=26242&form=MY01SV&OCID=MY01SV>

30 See BBC report, op. cit.

But going nuclear is not an easy enterprise. There are a myriad of obstacles.³¹ The NPT regime and subsequent international sanctions can profoundly cripple the South Korean export economy and its civilian atomic industry. The nuclear venture can also invite fierce American opposition, severely damaging the ROK-U.S. alliance. Despite Seoul's conservatives' wishful thinking, Washington will compel Seoul to give up its nuclear moves not only because of risks of nuclear proliferation, but also because of expected loss of control over South Korea. Indeed, as Chosun Ilbo's editorial points out, "there is no *raison d'être* for the U.S. to maintain its forces in South Korea if Seoul acquires nuclear weapons."³² Inter-Korean and regional nuclear arms races and the fear of mutually probable assured destruction could jeopardize, rather than enhance, South Korea's security. Of these, American opposition has been the most critical factor in dissuading its proponents from pushing for the independent nuclear option. It is with this understanding that they have switched their position from the independent nuclear armament to the instrumentalist one that favors the re-deployment of American tactical weapons and/or NATO type nuclear sharing.

31 Peter Hayes and Chung-in Moon, "Korea: Will South Korea's Non-Nuclear Strategy Defeat North Korea's Nuclear Breakout?" in George Shultz and James Goodby (eds.), *The War That Must Never Be Fought: Dilemmas of Nuclear Deterrence* (Stanford: Hoover Institution Press, 2015), pp. 395-403.

32 Chosun Ilbo Editorial, "if South Korea is armed with nuclear weapons, there is no need for American forces," Chosun Ilbo, November 13, 2019 (in Korean). https://www.chosun.com/site/data/html_dir/2019/11/12/2019111203527.html?form=MY01SV&OCID=MY01SV

Section 4.

SOUTH KOREA'S RESPONSES: REDEPLOYMENT OF AMERICAN TACTICAL NUCLEAR WEAPONS AND NUCLEAR SHARING

American nuclear protection is nothing new to South Korea. During the Korea War, the United States deliberated using nuclear weapons against North Korea and China.³³ In addition, the United States used to maintain 951 tactical nuclear warheads in South Korea until they were withdrawn in 1991. Several factors accounted for the decision. At that time, the DPRK did not have any nuclear weapons, and, thus, strategic justification was lacking. The moral dilemma also mattered. It was totally unjustifiable for the United States to use tactical nuclear weapons against the DPRK without such weapons. And maintaining tactical nuclear weapons was highly labor intensive and expensive requiring at least two certified technical persons to handle them. There was also a concern on their seizure, not by the DPRK, but by South Korea's radical nationalist students. Moreover, President George H. Bush decided to reduce tactical nuclear weapons deployed overseas.³⁴

Nevertheless, conservative politicians are now calling for the re-transfer of American tactical nuclear weapons.³⁵ They argue that DPRK nuclear threats have become real, and the only credible way to counter is the physical presence of American tactical weapons on South Korean soil. Cho Kyung-tae, a senior member of the opposition Liberty Korea Party, threatened that "if the U.S. refused to negotiate on the re-transfer, we should withdraw from the NPT and instantly enter the development of independent nuclear weapons."³⁶ Several others joined the move.³⁷ An opposition Liberty Korea Party delegation led by then its president Hong Jun-pyo paid a visit to Washington, D.C., to lobby for the redeployment.

33 Bruce Cumings, *Korea's Place in the Sun: A Modern History* (New York: Norton, 1997): 479-480.

34 Hayes and Moon, "South Korea...", op. cit: 405-407.

35 For a concise survey of this perspective, see Gui-geun Kim, "Pro and con on the new debate on deployment of tactical nuclear weapons and rationales," *Yonhap News*, September 11, 2017 (in Korean). <https://www.yna.co.kr/view/AKR20170911081000014>

36 Eun-cheol Lee, "Cho Kyung-tae proposes a nuclear sharing with the U.S. ..." *Busan Ilbo*, July 31, 2019. <http://www.busan.com/view/busan/view.php?code=2019073119381781177>

37 Jung-kyu Hong, "Ruling and opposition party members debate on the redeployment of redeployment of tactical nuclear weapons at the National Assembly," *Yonhap News*, September 21, 2016. <https://www.yna.co.kr/view/AKR20160921066451001?input=1195m>

Like Cho, he virtually threatened American congressional leaders and officials of the executive branch that unless the United States re-deploys tactical nuclear weapons to South Korea, his party will push for independent nuclear armament.³⁸ Hong strongly promoted the idea precisely because of fear resulting from President Trump's potential withdrawal of American forces from South Korea. The deployment of tactical nuclear weapons is essential to fill the vacuum that would be followed by the reduction and withdrawal of American forces. Lee Byung-chul, another liberal pundit, even urged opinion leaders and civil society to engage in public debates on the relevancy of redeployment of tactical nuclear weapons.³⁹

But the U.S. government as well as congressional leaders showed a cold response. For them, the American commitment to extended nuclear deterrence is firm, and the United States did not have any tactical weapons to deploy. From a strategic point of view, such redeployment is not desirable either because it can destabilize, rather than stabilize, the Korean peninsula. Deploying tactical nuclear bombs to South Korea could tempt the DPRK to launch a preemptive strike rather than deterring the use of nuclear weapons. Unlike the 1980s, Pyongyang now possesses such strike capability. American politicians and defense planners were dismayed by South Korean conservatives' questioning of the credibility of the current South Korea-U.S. alliance and the strategy of extended deterrence, which is based on the overwhelming nuclear power of the United States.⁴⁰

As the United States rejects the redeployment option, some conservatives in South Korea have shifted their attention to the NATO style nuclear sharing arrangement. During the Cold War, the United States and NATO members in Europe shared nuclear intelligence and developed and executed joint nuclear plans based on mutual discussions. There was also a division of labor in which five European countries where the U.S. military's tactical nukes had been deployed would use their own combat aircraft to drop U.S. gravity bombs. Won Yu-cheol of the opposition LKP organized a 'Nuclear Forum in which there have been extensive discussions on the NATO model. On November 12, 2019, the Forum convened a public session on "How to implement the ROK-U.S. Nuclear Sharing" and called for the deployment of American tactical nuclear weapons to South Korea and their sharing within the framework of the ROK-U.S. Combined Forces Command.

38 Yong-in Lee, "American experts oppose Hong Jun-pyo's proposal on redeployment of tactical nuclear weapons," Hankyoreh, October 26, 2017 (in Korean). <https://m.hani.co.kr/arti/politics/assembly/816193.html>

39 Byung-Chul Lee, "Exchange of deployment of tactical nuclear weapons and withdrawal of American forces in South Korea," Kyunghyang Shinmun, August 26, 2019 (in Korean). https://m.khan.co.kr/amp/view.html?art_id=201908262035025&sec_id=990100

40 Chung-in Moon, "False premise about N. Korean nuclear capabilities could have disastrous consequences" the Hankyoreh, May 17, 2021. http://english.hani.co.kr/arti/english_edition/e_editorial/995558.html

The Forum also demanded the routine stationing of American nuclear-powered submarines. More importantly, National Assemblyman Won, who once served as chair of the Defense Committee of the National Assembly, urged the Moon Jae-in government to place the agenda of 'nuclear sharing' at the 2019 ROK-U.S. Security Consultative Meeting.⁴¹

Another senior ranking LKP lawmaker, Chung Jin-seok, even proposed the activation of American submarines with nuclear weapons capability in the region that would be placed under the joint operation of Japan, South Korea, and the United States.⁴² Hong Joon-pyo lent his support to the idea by stating that "if a NATO-style nuclear sharing policy is introduced, the North Korean nuclear program will be under control, and we will be freed from being slaves to North Korea's nuclear program."⁴³ Several lawmakers joined him in advocating the nuclear sharing. A leading journalist, Bae Myong-bok, suggested that the ROK Air Force should be trained to be prepared to jointly use American tactical nuclear weapons deployed in Guam in the case of crisis escalation on the Korean peninsula.⁴⁴

The 'nuclear sharing' proposition was boosted partly because of one paragraph in an article on 2018 Nuclear Posture Review in the Joint Force Quarterly by the National Defense University: "The U.S. strategy strongly considers a potentially controversial new concept involving custodial sharing of non-strategic nuclear capabilities during times of crisis with select Asia-Pacific partners, specifically Japan and the ROK."⁴⁵ Strictly speaking, however, American nuclear bombs cannot be "shared." The right to decide whether nuclear weapons would be used lies entirely with the U.S. president; tactical nukes in Europe will not work unless the codes are entered in Washington. Moreover, achieving NATO-style coordination of nuclear policies would require the U.S. Senate to ratify a "program of cooperation" according to a 1958 amendment of the Atomic Energy Act (McMahon Act). But the chances of the Senate ratifying such a program with South Korea are effectively nil.

41 Da-in Rhyu, "National Assemblyman Won Yu-cheol organizes a forum to discuss on how to promote the ROK-US nuclear sharing accord". Jeongpil November 12, 2019. <https://www.jeongpil.com/173024>

42 Jihye Lee, "KLP calls for the examination of Korean style nuclear sharing for the strengthening of nuclear deterrence," Polinews, July 31, 2019 (in Korean). <https://www.polinews.co.kr/mobile/article.html?no=404942>

43 Uijin Hwang, "Hong Jun-pyo insists on the possession of nuclear weapons, Defense Minister Suh Wuk answered with a NATO-style nuclear sharing," Maeil Shinmun, September 16, 2020.

44 Myong-bok Bae, "NATO style nuclear sharing is in fact redeployment of tactical nuclear weapons," Joongang Ilbo, December 19, 2019 (in Korean). <https://news.joins.com/article/23660659>

45 R. Cort, C. Bersabe, D. Clarke, and D. Bello, "Twenty First Century Nuclear Deterrence: Operationalizing the 2018 NPR," Joint Force Quarterly 94 (3rd Quarter, 2019): 78.

According to Nautilus Institute Executive Director, Dr Peter Hayes, Germany and certain other European countries where the U.S. military's tactical nuclear weapons have been deployed actually prefer an approach of establishing nuclear deterrence based on tactical nuclear weapons in the continental United States or elsewhere overseas, based on declarations and the sharing of an extended deterrence doctrine of the same kind adopted by the South Korea-U.S. and U.S.-Japan alliances.⁴⁶ So the wiser choice would be to strengthen combined conventional deterrence based on trust in the extended nuclear deterrence provided by the United States, while using diplomatic talks to create opportunities for denuclearization.

Other than nuclear nationalists who argue for unconditional nuclear armament in the name of nuclear sovereignty, most conservative politicians and pundits appear to follow the instrumentalist approach in which redeployment of American tactical nuclear weapons or nuclear sharing between the ROK and the United States is considered as an alternative. The United States is highly unlikely to accommodate such demands. Likewise, South Korea is bounded by several formidable obstacles, and, thus, the potential for the nuclear domino phenomenon that is caused by South Korea seems very low. However, if South Korea seeks going nuclear independently, it is bound to precipitate it, negatively impacting Japan . How about public opinion in South Korea?

⁴⁶ Chung-in Moon, "Nuclear sharing" isn't a thing," The Hankyoreh, March 22, 2021 http://english.hani.co.kr/arti/english_edition/e_editorial/987761.html



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Section 5.

NUCLEAR WEAPONS AND PUBLIC OPINION IN SOUTH KOREA

South Korea's public opinion about going nuclear has been greatly influenced by Pyongyang's behavior. The DPRK's undertaking of nuclear weapons tests or ballistic missile test launches has aggravated South Korean public opinion in favor of nuclear weapons, whereas improved inter-Korean relations coincide with a rising anti-nuke attitude. Genron NPO, a Japanese opinion survey organization, has been conducting annual polls regarding Japanese and South Korean public attitudes on nuclear armament.⁴⁷ According to the survey, 59 percent of South Korean respondents supported the independent nuclear armament in 2016, while 36 percent of respondents opposed. But in 2017, when the DPRK undertook its sixth nuclear testing and 15 ballistic missile test launches, those who favored 'South Korea going nuclear' rose to 67.2 percent, whereas the figure for opposition dwindled from 36 percent to 26.7 percent. The 2018 survey revealed quite a different outlook, however. In 2018, there were two Korean summits in April and September, and the first historic meeting between American president and the DPRK leader was held in Singapore on June 12. Consequently, military tension on the Korean peninsula drastically reduced and the public responded as such. Those who favored nuclear armament dropped from 67.2 percent in 2017 to 43.3 percent in 2018, almost a 25 percent drop. Meanwhile, those who opposed nuclear armament rose from 26.7 percent in 2017 to 50.3 percent in 2018. As inter-Korean relations stalled following the failure of the Hanoi summit in February 2019, those who supported the nuclear armament increased to 59.6 percent in 2019 and 56.5 percent in 2020 respectively. On average, those who support the nuclear weapons reached an upper 50 percent, whereas those who oppose averaged around 35 percent.

A survey conducted by Gallop Korea in 2017 showed that 60 percent of respondents were in favor of nuclear weapons and 35 percent opposed. An interesting trend is that only 38 percent of respondents in their twenties supported nuclear armament, whereas over 60 percent of those sixty and over were in favor of it. A huge generational gap between the old and the young existed. Another survey conducted by the Asan Institute for Policy Studies in 2014 revealed motivations that affected public attitude on nuclear weapons.

⁴⁷ "The impression of the partner country has deteriorated in Japanese public opinion, but there are signs of improvement in Korean public opinion-Results of the 5th Japan-Korea Joint Public Opinion Survey," The Genron NPO, July 21, 2017 (in Japanese). <https://www.genron-npo.net/world/archives/6677-2.html>

Those who were in favor of nuclear armament cited, as primary reasons, nuclear deterrence against the North (38.9 percent), international influence (28.6 percent), national power and status (22.7 percent), and lack of trust in U.S. security commitment (4.8 percent) respectively. Meanwhile, those who opposed gave different motivations: unethical nature of nuclear weapons (46.4 percent), triggering of a regional nuclear arms race (31.2 percent), economic sanctions (9.2 percent), violation of international law (4.1 percent), and reliability of the American nuclear umbrella (3.3 percent). Albeit outdated, the Asan survey offers us an educated guess on South Korean public attitude on nuclear armament. Whereas those who support it reveal a strong realist orientation (i.e., deterrence, national power, and status), those who oppose it show a strong liberalist stance (unethical nature of nuclear bombs, fear of nuclear domino, economic sanctions, and international law).⁴⁸

Public attitude on nuclear armament does not seem to be static. A recent study by Sang-yong Sohn and Jong-hee Park shows that South Korean voters' attitude on nuclear armament can change drastically when and if more information is provided through public debate. Using the method of experimental questionnaire, they started with the assumption of 61 percent supporting nuclear armament and 39 percent opposing it. Figures were drawn from the Gallop Korea survey data. Then, voters were exposed to public debates on nuclear armament with more information on its costs and benefits as well as opportunities and constraints. After respondents' exposure to new information, Sohn and Park estimated, those who support the nuclear armament would decrease from 61 percent to 38 percent, while those who oppose would rise to 62 percent. Their study revealed that supporters of nuclear weapons turned out to be most sensitive to information related to economic damages that could result from international sanctions. Attitude change of those who oppose nuclear armament was affected mostly by information on the erosion of American security commitment.⁴⁹ This implies that public debates and exposure of objective information on nuclear armament can play an important role in changing citizens' attitude.

In sum, the DPRK has significantly increased its nuclear and missile threats since 2017, which South Korea perceives as existential ones. The Moon Jae-in government has been trying to manage those threats through the mix of extended nuclear deterrence by the United States and diplomatic negotiation, but conservative politicians and pundits, defying such efforts, have been raising their voices in favor of independent nuclear armaments.

48 Jiyeon Kim, "South Korean Attitudes toward the Nuclear Weapons Development: A Survey Analysis," a paper presented at the International Joint Seminar on Assessing Northeast Asia Nuclear Domino, organized by APLN and the Sejong Institute, May 14, 2021.

49 Sang-yong Sohn and Jong-hee Park, "Do South Korean Voters Really Want Nuclear Armament?" *The Korea Political Science Review* 54, no.2 (June 2020): 174-204.

The teleological school advocates the development and possession of nuclear weapons for nuclear sovereignty and nuclear deterrence, the instrumentalists, realizing structural and institutional constraints to it, have called for the redeployment of American tactical weapons and/or nuclear sharing.

There are two contending schools. Whereas the teleological school advocates the development and possession of nuclear weapons for nuclear sovereignty and nuclear deterrence, the instrumentalists, realizing structural and institutional constraints to it, have called for the redeployment of American tactical weapons and/or nuclear sharing. The teleological school still remains a minority, but a sudden rise in Pyongyang's assertive behavior, signs of waning American security commitment, and deepening of strategic instability in Northeast Asia can readily resuscitate pro-nuke sentiments in South Korea. It is more so because an upper 50 percent of respondents on average support South Korea going nuclear. Public debate and exposure to accurate information can change public attitude, however. That is a positive sign.

Section 6.

JAPAN AND NUCLEAR DOMINO

Japan is the only victim of nuclear bombing in the world. The tragedy of Nagasaki and Hiroshima is still deeply and widely ingrained in the hearts of Japanese people. That is why the anti-nuke pacifist movement has been so strong in Japan. The peace constitution and the American provision of a security umbrella under the Yoshida doctrine have also served as additional deterrents to the development of nuclear weapons in Japan. It was in this context that Japanese Prime Minister Eisaku Sato, a one-time proponent of a Japanese nuclear force, put forward in 1967 the Three Non-Nuclear Principles of not possessing, producing, or introducing nuclear weapons.⁵⁰

But North Korea's nuclear/missile threats, China's rise and nuclear build-up, and the perceived erosion of the American commitment to extend nuclear deterrence have renewed debate on whether Japan should go nuclear.⁵¹ That was the case in the past. When China undertook its first nuclear test in October 1964, Japan's response was fierce. The Sato cabinet's Office of Research and Intelligence published a report that, while Japan needs to adhere to its non-nuclear position, it should demonstrate its technological capability for nuclear armament. Japan should engage in large scale nuclear and space rocket research.⁵² Some conservative political leaders expressed their support of nuclear armament in the past. Kishi Nobuske, former prime minister, stated that "possessing nuclear weapons for self-defense is constitutional" as early as in 1957.⁵³ His grandson and former Prime Minister Abe Shinzo also made the following statement at his speech at Waseda University on May 13, 2002, when he was Vice Minister of Cabinet Affairs: "From a constitutional point of view, there is no problem with nuclear armament. Once committed, Japan can have nuclear weapons in a week."⁵⁴

50 Nobumasa Akiyama, "Japan's Disarmament Dilemma: Between Moral Commitment and the Security Reality," in George Shultz and James Goodby (eds.), *The War that Never Be Fought* (Stanford: The Hoover Institution, 2015): 437-480.

51 Ohashi Takushi (大橋拓史), "Nuclear armament under attack, Taboo trend that blocks free discussion," *Sankei*, September 17, 2017 (in Japanese). <https://www.sankei.com/politics/news/170917/pl1709170006-n1.html>

52 "Japan's nuclear weapons development," Wikipedia. <https://bit.ly/3EaS11D>

53 Ohashi Takushi, *op. cit.*

54 "Japanese Nuclear Weapons Program," Wikipedia. https://en.m.wikipedia.org/wiki/Japanese_nuclear_weapon_program/

In October 1999, Nishimura Shingo, then Vice Defense Minister, had to resign from his post because of pressures from civil society after stating that possessing nuclear weapons is beneficial to Japan's national security and that the Japanese Diet needs to discuss nuclear armament.⁵⁵

As in South Korea, the Japanese government has been firm on its non-nuclear position by declaring its adherence to the three non-nuclear principles. Kato Katsunobu, the incumbent Minister of Cabinet Affairs downplayed debates on the nuclear path by indicating the indispensable nature of American nuclear deterrence under the Japan-U.S. security system.⁵⁶ The government position notwithstanding, since the DPRK's sixth nuclear testing in 2017, Japanese conservative politicians and pundits began to reactivate old debates, which are not on nuclear armament per se, but on whether Japan should engage in public debates on the subject and whether Japan should maintain nuclear latency. Kato Ryozo, former Japan's ambassador to the United States, a vocal advocate of public debate on nuclear armament, argues that "regardless of the American credibility, it should be allowed to have debates on the possession of independent nuclear weapons as the last resort to protect country's interest." And "it is inappropriate to ban public debates because they can be linked to a credible deterrence."⁵⁷ By pointing out that there are 'Four Non-Nuclear Principles' of no possessing, no making, no introducing, and no debating. Ishiba Shigeru, former Defense Minister, asserted that it is time to get away from 'no debating' and that "it is not a right attitude to trust the American nuclear umbrella without any verification."⁵⁸ According to a survey conducted in 2006, 61 percent of respondents answered that discussion on nuclear options should not be taboo.⁵⁹

55 Ishinabe Kei(石鍋圭), "Can the Liberal Democratic Party be called a responsible party without debating on the possession of nuclear weapons?" Sankei, September 22, 2017 (in Japanese). <https://www.sankei.com/premium/news/170922/prm1709220010-n1.html>

56 "Minister Kato stated that American 'no first use' policy can undermine Japan's national security," Sankei, April 6, 2021 (in Japanese). <https://www.sankei.com/politics/news/210406/plt2104060019-n1.html>

57 Kato Ryozo, "Japan should have rational debate on the nuclear question regarding gains and losses of the possession of nuclear weapons"(Kakuho-yu-ni yorieru mono, ushinau monowa nanka: nihonno kakumondaio rise-tekini ronze-yo)," Sankei, February 2, 2018. <https://www.sankei.com/column/news/180202/clm1802020004-n1.html>

58 Chiba Tomoyuki and Hiroike Keiichi, "Former Defense Minister Ishiba Shigeru calls for verification of effectiveness of American nuclear umbrella... How to prevent the nightmare of Korean unification under North Korea?" (Ishiba Shigeru moto boue-syo- kakuno kasa zikkouse-kensyou-o kitaga hanto-to-itsuno akumu do-husegu?), Sankei September 15, 2017. <https://www.sankei.com/politics/news/170915/plt1709150083-n1.html>

59 Akiyama, op. cit.: 456.

Those who advocate Japan's nuclear latency still remain strong. Conservatives in Japan argue that Japan needs to maintain 54 nuclear reactors and its Monju faster breeder reactor to secure nuclear latency due to its worsening security environment and waning American security commitment. Japan must be ready for independent nuclear armament when and if the American nuclear umbrella is gone.⁶⁰ Ishiba Shigeru also concurs with this position by stating that Japan should maintain the existing nuclear energy program to secure "a latent nuclear deterrence with which Japan could make nuclear weapons in a certain period of time."⁶¹ In fact, Japan has an immense stockpile of fissile materials. As of 2016, Japan is known to have acquired 47.8 ton of plutonium and 1.5 ton of enriched uranium.⁶² In addition, since Japan has rocket capability to launch satellites into space, developing various delivery vehicles will not pose any daunting challenges. It is not easy for Japan to transform these fissile materials into nuclear bombs because of International Atomic Energy Agency (IAEA) and U.S. regulations. But once committed, Japan can easily emerge as a nuclear weapons state.

But some ultra conservative pundits advocate for the development and possession of nuclear weapons to deal with threats originating from the Korean peninsula. For example, Watanabe Tsuneo, a research fellow at the Sasakawa Peace Foundation, advocated a conditional nuclear armament by stating that "as long as nuclear weapons exist on the Korean peninsula, Japan should enter nuclear armament. Japan should disarm nuclear weapons when nuclear weapons on the Korean peninsula are removed."⁶³ Journalists at the conservative Sankei newspaper also argue that "the advent of North Korea-led unified state on the Korean peninsula will be the worst nightmare to Japan. If that happens, Japan should consider acquiring nuclear weapons."⁶⁴ Shimada Yoichi, professor of Fukui Prefectural University, even argued that judged on IAEA's exceptional treatment of India, there is an international trend in which sanctions would not be imposed on the nuclear move of 'responsible states like Japan.'⁶⁵ All these ideas surfaced in Japan immediately after the DPRK undertook its sixth nuclear testing in 2017, implying that nuclear developments on the Korean peninsula can bring about significant impacts to Japan.

60 Huruya Tunehira(古谷経衡), "Ten years after the nuclear reactor incident, reviving voice of nuclear armament," *Asahi Ronza*, March 7, 2021 2021년 3월 7일 (in Japanese). <https://webronza.asahi.com/politics/articles/2021030200008.html?page=1>

61 Quoted from Akiyama, op. cit.:456.

62 Ian Easton, "Japanese Strategic Weapons Programs and Strategies: Future Scenarios and Alternative Approaches," in Sokolski, op. cit.:3-34.

63 Sakurada Jun, "Japan's nuclear armament debate, dashing or avoiding both are too easy going (Nihon no kakubuso-ron tobitsukunomo kihisurunomo izuremo antsyokusugiru), *Gendai Business*, October 26, 2017. <https://gendai.ismedia.jp/articles/-/53273?imp=0>

64 Chiaie and Hiroiko, op. cit.

65 Shimada Yoichi(島田洋一), "Don't avoid the nuclear armament debate," *Sankei*, September 6, 2017. <https://www.sankei.com/column/news/170906/clm1709060006-n1.html>

In this sense, it cannot be denied that there exist perceived chain reactions of nuclear dominos between Korea and Japan.

It will be hard for Japan to seek a nuclear venture. Its peace constitution, three non-nuclear principles, and Japan's excessive reliance on American security protection are likely to prevent Japan's move toward nuclear armament.

Nevertheless, it will be hard for Japan to seek a nuclear venture. Its peace constitution, three non-nuclear principles, and Japan's excessive reliance on American security protection are likely to prevent Japan's move toward nuclear armament. In fact, as early as 1970, the Sato cabinet concluded that Japan's nuclear armament is impossible by citing three reasons: difficulty of conducting underground nuclear testing, vulnerability of industrial concentrated areas to nuclear attacks, and diplomatic isolation. It is for these reasons that conservative politicians and pundits in Japan have favored the introduction of American tactical weapons to Japan and nuclear sharing between Japan and the United States. For example, Ishiba Shigeru once said that "it is contradictory not to deploy American nuclear weapons in Japan's soil, while seeking American nuclear protection." He then argued for the abolition of 'non-introduction' principle of the three non-nuclear principles, while permitting American submarines armed with nuclear weapons to enter Japan's ports.⁶⁶

In contrast to South Korea, public opinion in Japan is not favorable to nuclear armament. According to a Sankei/FNN joint opinion survey conducted on September 16 and 17, 2017, immediately after the DPRK's sixth nuclear testing, 43.2 percent of respondents supported the initiation of public debates on the three non-nuclear principles, whereas 55.7 percent opposed even the debates. Opposition to the introduction of the American nuclear weapons into Japan was much higher. 69.9 percent responded that the introduction of American nuclear weapons is impossible, and only 26.2 percent supported. As to Japan's possession of nuclear weapons, 79.1 percent opposed, whereas only 17.7 percent favored.⁶⁷ Another survey by NPO Genron shows a similar trend. In 2017, those who opposed nuclear armament was 74.7 percent, while only 9 percent supported. Opposition to nuclear armament was 65.5 percent in 2018, 69 percent in 2019, and 66.7 percent in 2020, respectively.⁶⁸ Likewise, public attitudes in Japan are still strongly opposed to nuclear armament as well as the introduction of American nuclear weapons.

66 Ishinabe Kei, op. cit.

67 Sase Masamori(佐瀬昌盛), "Under North Korea's threats, Japan should swift to 'two non-nuclear principles,'" Sankei, September 27, 2017. <https://www.sankei.com/column/news/170927/clm1709270007-n1.html>

68 <https://www.genron-npo.net/world/archives/6677-2.html>

Moreover, local governments such as the Hiroshima prefecture and the City of Nagasaki as well as anti-nuke NGOs such as the Research Center for Nuclear Weapons' Abolition (RECNA) at the University of Nagasaki, Peace Depot, and Pugwash Japan have been very active in monitoring and resisting any moves toward nuclear armament.

DPRK's growing nuclear and missile threats, China's rise and regional instability, and the unpredictable nature of American security commitment have fueled public debates on nuclear armament in Japan. Unlike South Korea, a nuclear taboo deeply rooted in Japanese society has prevented the advent of an outright support of a nuclear path. Conservative politicians and opinion leaders, however, have been championing the right to debate nuclear armament and to maintain a nuclear latency.

In sum, the DPRK's growing nuclear and missile threats, China's rise and regional instability, and the unpredictable nature of American security commitment have fueled public debates on nuclear armament in Japan. Unlike South Korea, a nuclear taboo deeply rooted in Japanese society has prevented the advent of an outright support of a nuclear path. Conservative politicians and opinion leaders, however, have been championing the right to debate nuclear armament and to maintain a nuclear latency. Some even suggest the deletion of a 'non-introduction' clause of 'three non-nuclear principles,' which would allow the deployment of American nuclear weapons in Japan. Nevertheless, their approach has been cautious. Public opinion is strongly against nuclear armament as well as the introduction of American nuclear weapons. Thus, even if Japan has accumulated considerable fissile materials and missile capabilities, any visible moves toward nuclear armament remain undetectable .



Section 7.

IMPLICATIONS FOR THE NUCLEAR DOMINO PHENOMENON IN NORTHEAST ASIA

North Korea's nuclear and missile threats have greatly heightened the potential for a nuclear domino phenomenon in Northeast Asia by fostering nuclear temptation in South Korea and Japan. It is precisely because Japan and South Korea possess fissile materials and technological capabilities. Nevertheless, the nuclear domino is not likely to materialize anytime soon. Both the Japanese and South Korean governments are fully committed to their non-nuclear stance. They also lend full confidence in American extended nuclear deterrence and, therefore, oppose the redeployment of tactical nuclear weapons and the NATO-type nuclear sharing. Fear of international sanctions and negative impacts on their economy and the civilian atomic industry, a potential rupture in their alliance relationship with the United States, and a dangerous nuclear arms race on the Korean peninsula and in the region have served as effective deterrents against the nuclear move in Japan and South Korea.

The domestic political and social atmosphere does not seem to favor the nuclear path either. Public opinion in Japan is strongly opposed to it, and anti-nuke movements by Japanese local governments and civil society are well organized and constantly on alert. South Korea is somewhat different from Japan. A relatively high public support and conservative politicians' efforts to politicize the nuclear issue, amidst the DPRK's constant nuclear threats, make South Korea a weak link in the nuclear domino equation. However, public exposure to adequate information on the costs and constraints of nuclear armament can alter their attitude.

It can be concluded that the Northeast Asia nuclear domino syndrome exists as a potentiality, not a concrete, reality. Failure to mitigate the regional threat environment, negative signals from the United States in terms of either weakening commitment to its extended nuclear deterrence or encouragement of nuclear armament in Japan and South Korea, and abuse and misuse of the nuclear issue for domestic political purposes, can easily turn the current nuclear temptation into actual nuclear armament, leading to a nuclear domino disaster. Japan and South Korea could easily be locked into a ratchet effect. The country that gets into nuclear armament first will surely induce the other to follow the suit. It is more so because of rapidly deteriorating bilateral relations.

The most critical step to prevent a nuclear domino in Northeast Asia is to mitigate its overall security environment. The North Korean nuclear quagmire should be resolved peacefully.

What should be done? The most critical step to prevent a nuclear domino in Northeast Asia is to mitigate its overall security environment. The North Korean nuclear quagmire should be resolved peacefully. Otherwise, there will be constant nuclear temptation in Japan and South Korea. China's nuclear modernization and build-up should also be addressed. The size of China's current nuclear arsenal is relatively small compared with that of the United States and Russia, but the United States should take a more constructive role in slowing down any strategic arms race in the region. Improvement of Japan-South Korean relations is essential for the prevention of the nuclear domino. Protracted antagonistic confrontation between the two countries will be the breeding ground for a nuclear arms race.

The United States can reshape the nuclear equation in the region in two ways. One is related to its extended nuclear deterrence. Since the days of the Trump administration, Japan and South Korea have been suspicious of the American security commitment. Proponents of the nuclear armament believe the United States would not sacrifice American cities for Seoul and Tokyo. Such uncertainty has been responsible for propelling public debates on nuclear armament in Japan and South Korea. The other is a signal from Washington that the United States would be permissive of nuclear armament of Japan and South Korea. Such signal may well unleash them from the nuclear taboo. Thus, it is very important for the United States to manage its signal in which it assures an adequate extended deterrence, while avoiding the tolerant attitude of nuclear venture in Japan and South Korea.⁶⁹ The United States should play a more constructive role in slowing down the strategic arms race in the region. Improvement in Japan-South Korea relations is also essential for the prevention of the nuclear domino.

One caveat is in order. The myth of 'U.S. extended nuclear deterrence' needs to be unraveled. As Allan Behm aptly argues, it is neither credible nor rational precisely because the United States, North Korea, and even South Korea are in fact playing compellence, not deterrence games.⁷⁰

69 Robert Einhorn made this point clearly in his interview with a South Korean media. Jemin Sohn. "Interview with Einhorn, 'Chance for South Korea's nuclear armament is low, but the U.S. should not take it for granted.'" *Kyunghyang Shinmun*, August 17, 2016 (in Korean). https://m.khan.co.kr/view.html?art_id=201608170741001&code=970201#c2b

70 Allan Behm, Special Report: Extended Nuclear Deterrence in a Pandemic World," APLN (Asia-Pacific Leadership Network for Nuclear Non-proliferation and Disarmament), (October 2020). https://www.apln.network/projects/pandemic-nuclear-nexus-project/pandemic-nuclear-nexus-scenarios-project_extended-deterrence-and-extended-nuclear-deterrence-in-a-pandemic-world

While maintaining a credible conventional extended deterrence on the Korean peninsula, countries in the region should deliberate a nuclear weapons free zone in Korea and Northeast Asia with a comprehensive security framework such as the Northeast Asian Security Summit.⁷¹

Chorus of 'going nuclear' can surface anytime, depending on the DPRK's behavior. Hardline conservatives will try to capitalize on it for the advancement of their cause of 'independent nuclear weapons.' It cannot be ruled out that some people could have a foul play of clandestinely promoting nuclear latency. International society should stay on alert for this movement by strengthening its monitoring and safeguarding regime.

Worrisome is the advent of an adversarial coalition among pro-nuke forces across national borders. Hardline advocates of nuclear weapons development in the DPRK, South Korea, and Japan have in fact formed an adversarial coalition. Such a transnational coalition should be rejected. Civil society and NGOs in Japan and South Korea should stay vigilant on those dark forces by cultivating solidarity as well as engaging in anti-nuke movements.

Finally, citizen education and sharing of unbiased information related to nuclear weapons and proliferation seems very important. As the South Korean survey data shows, those who support nuclear armament can change their view after being exposed to data related to costs and constraints of going nuclear. Thus, there should be national and international efforts to educate citizens on the danger of nuclear weapons by disseminating timely and objective information.

71 Thomas Pickering, Morton Halpern, Peter Hayes, Chung-in Moon, and Leon Sigal, "Ending the North Korean Nuclear Threat by a Comprehensive Security Settlement in Northeast Asia," Nautilus Institute for Security and Sustainability (November 2017). <https://nautilus.org/napsnet/napsnet-policy-forum/ending-the-north-korean-nuclear-threat-by-a-comprehensive-security-settlement-in-northeast-asia/>



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The Asia-Pacific Leadership Network for Nuclear Non-Proliferation and Disarmament (APLN) is a network of political, military, and diplomatic leaders from sixteen countries across the Asia-Pacific tackling security and defence challenges with a particular focus on addressing and eliminating nuclear weapon risks.