KOREAN PENINSULA NUCLEAR ISSUE: CHALLENGES AND PROSPECTS

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ANASTASIA BARANNIKOVA

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I. INTRODUCTION

Anastasia Barannikova argues that the DPRK's nuclear status has already been accepted as a part of the regional status quo, and attempts by other actors to change the DPRK's nuclear status would be destabilizing to regional security.

Anastasia Barannikova is a research fellow at ADM Nevelskoy Maritime State University (Vladivostok, Russia) and non-resident senior fellow of Mongolian Institute of Northeast Asian Security and Strategy (Mongolia).

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North East Asia (PSNA) **here** The year 1 final report of the project is now available **here**

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Banner image: Child foraging, UNICEF here; DPRK nuclear warhead, Rodong Singmun, here

II. NAPSNET SPECIAL REPORT BY ANASTASIA BARANNIKOVA

KOREAN PENINSULA NUCLEAR ISSUE: CHALLENGES AND PROSPECTS

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Summary

For the last three decades[1] the Korean Peninsula nuclear issue (KPNI) has been considered as one of the most serious threats to security and stability in NEA (Northeast Asia). To date, none of the efforts by the international community—including Six-party talks, pressure and diplomatic efforts, and more recently, activity started by the Democratic People's Republic of Korea (DPRK) in 2018-2019—have yielded tangible results in addressing the issue. This puts into question the viability of the existing approaches to the DPRK and the feasibility of achieving a KPNI solution.

How Did the DPRK Become Nuclear?

How the North Korean nuclear program started

The DPRK's national nuclear program started in 1952, when the North Korean government established its Atomic Research Institute. The dominant opinion among scholars is that the Democratic People's Republic of Korea (DPRK) was able to start and develop its nuclear program mainly due to the technical and technological assistance of the USSR and China. The technological base of the North Korean nuclear program, however, started forming during the Japanese annexation of Korea. One of the technical bases of Japan's nuclear program was located in the northern part of Korea, near the city of Heungnam (now Hamhung). Though speculations that the Japanese wartime nuclear weapons program achieved any significant results lack evidence, North Koreans were able to "inherit" at least mined and processed uranium as well as the knowledge acquired during the work of DPRK scientists and technicians at Japanese facilities. The "fathers" of the North Korean nuclear program were also educated in Japan during the colonial period.[2]

After the end of Korean War, the DPRK was able to acquire advanced technologies and educate its specialists in the leading universities of the USSR as a part of Soviet-North Korean cooperation in peaceful atomic energy use (and other uses for radioactive elements). Later, the specialists from the DPRK received applied nuclear training in China and studied in other countries including Bulgaria, German Democratic Republic, etc. In 1965 the Soviet Union supplied and installed an IRT-2000 research nuclear reactor, a radiochemical laboratory, a K-60000 cobalt installation and a B-25 betatron (a particle accelerator for electrons) at Yongbyon. The radiochemical laboratory was very advanced by the standards of that time. Particularly, it made it possible, among other things, for the

DPRK to separate radioactive isotopes from spent nuclear fuel and thus to extract weapon-grade plutonium.[3]

By the 1970s, the North Korean nuclear program had begun to accelerate beyond the assistance provided by other states. The DPRK modernized its reactor and increased its capacity without notifying the USSR. During this time, the DPRK is reported to have begun exploring the possibility of creating its own nuclear weapons.[4] At the beginning of the 1970s the DPRK focused on developing a full nuclear cycle that would provide the technical capability to produce nuclear weapons. Along with external factors—the permanent military threat from the United States and unstable relations with allies—the DPRK was likely motivated by the efforts made by the Republic of Korea (ROK) to develop its own nuclear program. At the beginning of 1970 a political decision was made in the ROK to launch a military nuclear program. Already in 1974 South Korean scientists were close to creating nuclear weapons. The United States received information about the ROK's plans to create a prototype of a nuclear charge and acquire advanced missile technologies (in particular, solid-fuel engines), and pressed the ROK to stop those activities and to ratify the Nuclear Non-proliferation Treaty (NPT) in 1975. Despite the attempt of the United States to keep the ROK's nuclear weapons-related research a secret, the rapid progress of the South Korean nuclear program spurred North Koreans to accelerate their own efforts in the nuclear sphere. Moreover, the ROK secretly continued nuclear experiments[5] after 1975, a fact that only became known to the international community in the beginning of the 2000s. DPRK intelligence was able to obtain information about those experiments much earlier. This period (the 70s) is also notable for the fact that the DPRK started military cooperation with Pakistan and cooperated with China in the sphere of ballistic missiles technologies.[6]

The DPRK signed the NPT in 1985, as a prerequisite for technical cooperation with the USSR on the construction of a light water nuclear power plant in the DPRK. In the mid-1980s the DPRK also started construction of a 50-megawatt reactor at Yongbyon with the assistance of China and Pakistan.[7] Cooperation with Iran also started during that period. During the period of the Iran-Iraq war (1980-1988) Iran started buying North Korean ballistic missiles. In response Iran shared sensitive data from their missile test-launches, thus helping the DPRK to further advance its technologies. Depending on the foreign policy situations at various times during that period, the two countries cooperated as testing grounds for missile development for each other.[8] Their cooperation in the sphere of nuclear and missile development continued through the beginning of the 2000s.[9] In the 1990s the DPRK acquired uranium enrichment centrifuge technology[10] through Pakistani scientist A. Q. Khan and designs for a uranium warhead that Pakistan had likely obtained from China. In exchange, Pakistan received North Korean missile technology. After the collapse of the Soviet Union the DPRK was able to obtain sensitive missile technologies and hire missile specialists from former Soviet states, including Russia and Ukraine.[11] For example, the latest breakthrough in DPRK intercontinental ballistic missile (ICBM) technologies was made possible by the acquisition of high-powered engine technology from Eastern Ukraine.[12]

Responsibility of the USSR/Russia and China

As is clear from the previous section of this paper many countries, directly or indirectly, voluntary or involuntarily, and regularly or occasionally, have contributed to the development of the North Korean nuclear program in the past. Does this mean that they bear responsibility for the current situation in which the DPRK has acquired and is constantly improving its nuclear arsenal?

While providing technical and technological assistance in the field of peaceful nuclear energy, the USSR could not know and thus was not responsible for the intention of the DPRK leadership to start a military nuclear program. Given the experience of Korean War and lingering conflicts on the peninsula, a nuclear-armed DPRK was not in the interests of the USSR. Moreover, the USSR had had

a previous negative experience in nuclear cooperation with China. After the USSR provided assistance to China in the nuclear sphere, a cooling of Soviet-Chinese relations occurred. As a result, Moscow gained a new nuclear-armed rival in the Far East. In this context the USSR would have been willing to carry out cooperation with the DPRK only in the sphere of "the peaceful atom." Moreover, the DPRK was just one of the number of countries cooperating with the USSR on nuclear technologies. The USSR carried out cooperation with the DPRK in the nuclear sphere up to certain limits and on a general basis.[13] Mirroring the "Atoms for Peace" initiative declared by the US president in 1953, the USSR concluded agreements on assistance in nuclear research and on the peaceful use of atomic energy with a number of countries—Hungary, Poland, Romania, the PRC, and others—during the 1950s.

So, on the one hand, the USSR should not be blamed for the decision of the DPRK to transfer its nuclear program to a military footing. On the other hand, the inconsistency of policies of the USSR, and then of Russia, might have influenced the DPRK's nuclear ambitions. The DPRK established allied relations with the USSR by signing a Treaty of Friendship, Cooperation and Mutual Assistance in 1961. Already by 1962, however, the Cuban missile crisis occurred. The inconsistency of the USSR government was perceived by Pyongyang as a betrayal to Cuba and interpreted as a readiness to betray other smaller socialist countries.[14] That case convinced the DPRK of their ally's unreliability and of the need to take care of its own security. Since the DPRK's enemy (the United States) was a nuclear state, it was logical that the DPRK had to rely upon its own nuclear deterrent to protect itself. There were other cases after the Cuban missile crisis that served to deepen mistrust of Moscow in the eyes of Pyongyang. The situation regarding the transfer to the DPRK of nuclear power plant technology is also an example. The DPRK joined the NPT as a sine qua non for the construction of a nuclear power plant in the DPRK with assistance from the USSR. That nuclear plant, however, was never built. After the collapse of the USSR the DPRK lost its major ally and bilateral military, political, and ideological cooperation was curtailed. This change might have given the DPRK's leadership another confirmation that its decision to go nuclear on its own was the right decision. Despite the restoration of relations between Russia and the DPRK in the 2000s, a formal military alliance between the countries has never been revived.[15]

Currently, Russia takes a neutral position on the Korean Peninsula and is limited to support of China on issues related to this region in general and with regard to the KPNI in particular. The DPRK's nuclear program is viewed by Russia as a threat to the nonproliferation regime, but not as a direct threat to Russia's security. However, Russia's approach to the NPT and nuclear proliferation is conservative enough.[16] At the same time there are discussions in some expert circles in Russia about the "nuclear emancipation" of the DPRK and recognizing it a "lesser nuclear state." These opinions echo those of Chinese scholars.

As for China, its motives might have differed from those of the USSR, as much as the motives of modern China differ from those of Russia. There are opinions that China made a conscious decision to arm its allies with nuclear weapons technology in 1980. At the same time the participation of China in developing nuclear weapons abroad could be only indirect and only limited to assistance to Pakistan, which, in turn, provided nuclear weapons technologies to the DPRK via Dr. Khan's network. Several key Chinese banks and a specially-created holding company funded the North Korean missile and nuclear technology programs in the recent past,[17] and China has remained the DPRK's trading partner after the latest United Nations Security Council (UNSC) sanctions were imposed on the DPRK.

One of the goals behind China's support for arming the DPRK with nuclear weapons could be Korean reunification under a North Korean regime. Another is splitting the US-ROK alliance. China may have believed that development of the North Korean nuclear weapon program and failure to

denuclearize the peninsula would eventually lead the United States to pull its military forces out of the ROK.[18] However, despite all of the changes over time, and the periodic talks about reduction/withdrawal of the US troops and other problems within the US-ROK alliance, the alliance is still alive. There is also a permanent risk that in response to the DPRK "nuclear threat" Japan and the ROK may decide to go nuclear. Such a development is considered completely unacceptable for China. On the other hand, however, the nuclear arming of the ROK would almost certainly mean the end of its military alliance with the United States, which is considered one of China's strategic goals.

China's top priorities are maintaining security in the region, preventing a military conflict, averting instability, and generally keeping the situation under control. For the sake of stability and predictability, China may even be ready to sacrifice the DPRK's nuclear disarmament. Remarks by Chinese experts have indicated that China may be willing to reconcile itself to a nuclear-armed DPRK.[19] It therefore cannot be ruled out that the Chinese leadership hopes to preserve and increase its influence on Pyongyang in the future. In such a case, a DPRK armed with a small nuclear arsenal will not represent a threat to China. Beijing can also turn a "blind eye" to the North Korean nuclear program because it is an obstacle to inter-Korean rapprochement, which would not serve China's interests. China regards the entire Korean peninsula as the sphere of its strategic interests and maintains "divide and control" tactics there.

However, despite the goals behind the assistance that countries, entities, and actors have rendered to the DPRK in the nuclear sphere, the transfer of the nuclear program to a military footing was the DPRK's own leadership's decision and responsibility, and it was determined by specific motivating factors.

DPRK Motivations for Acquiring Nuclear Weapons

Has the North Korean nuclear program ever been peaceful?

Initially the DPRK's nuclear program was supposed to be peaceful (it was, as noted above, an essential condition of cooperation of the USSR with the DPRK in the nuclear sphere) and was aimed primarily at solving an energy deficit problem. Hydroelectric power plants (as well as other energy infrastructure) in the DPRK were destroyed by US air strikes during the Korean War. Along with reconstruction of damaged energy systems it was decided to develop nuclear energy, capable of compensating for the DPRK's electric power deficit. The choice in favor nuclear energy was also determined by the existence of North Korean reserves of uranium, discovered in the DPRK at the end of the 1940s. The DPRK had not explored oil and gas resources, and importing those fuels from other countries would have made it dependent on external supplies, contrary to the DPRK ideology of self-reliance.

As was mentioned above, the political decision to start work on the creation of nuclear weapons was made by the DPRK at the turn of the 1970s. However, no later than December 1962 the DPRK's line of the parallel development of its economy and of its national defense was adopted at the 5th Plenary Meeting of the 4th Central Committee of the WPK (Workers Party of Korea). This line is considered an early version of byungjin (parallel development) policy, implying economic construction and development of nuclear forces.[20] The context surrounding that decision should also be taken into account. In 1961 the DPRK established allied relations with the USSR and China by signing treaties of Friendship, Cooperation, and Mutual Assistance. These treaties could have eliminated the need to acquire its own nuclear weapons as the DPRK obtained guarantees from Moscow, similar to those of the US "nuclear umbrella" for the ROK and Japan. Pyongyang kept its distance from its allies, however, trying to preserve its independence, playing on disputes between Moscow and Beijing and keeping its nuclear program out of their control. The maintenance of secrecy around the DPRK nuclear program, even at that time, suggests that the program might be not have been that peaceful,

and the development of energy sources and scientific know-how were not the only goals behind the nuclear program of the DPRK. Moreover, scholars[21] point out that in the early 1950s nuclear technologies were associated primarily with weapons—those used in Hiroshima and Nagasaki, as well as with those tested by the USSR in 1949. The concept of the "peaceful atom" simply did not exist that time. The world's first nuclear power plant connected to a power grid was not launched until 1954.

Given the prevailing view of nuclear weapons at that time, it can be assumed that the DPRK's nuclear program pursued military goals from the very beginning. The ROK's nuclear experiments, which has become known to the North Korean intelligence earlier than to everyone else, became a catalyst for the DPRK's nuclear program, forcing the DPRK to voice its ambitions openly.

Inconsistency demonstrated by the DPRK later, for example, by joining the NPT and the IAEA and at the same time continuing military nuclear experiments, only prove that the DPRK always had military goals for its nuclear program.

Motivating Factors

Researchers studying nuclear proliferation propose numerous classifications of factors motivating countries to develop nuclear weapons. Harald Müller and Andreas Schmidt formulated the following list of factors motivating countries to develop nuclear weapons: security, considerations of status and prestige, internal factors (domestic policy), and the factor of technical progress.[22] Sico van der Meer analyzed existing theories on nuclear (non-) proliferation motivations and reduced them to four factors of influence: (1) Capabilities, (2) Security, (3) International Norms and Perceptions, and (4) Domestic Political Context.[23]

Mark S. Bell in his article "Nuclear opportunism…" offers an explanation for why different states use nuclear weapons to facilitate different combinations of six foreign policy behaviors: *aggression, expansion, independence, bolstering, steadfastness*, and *compromise*. The theory of nuclear opportunism presented in his article argues that states in different strategic circumstances have different political priorities.[24]

The DPRK motivations for acquiring nuclear weapons might look like those shown in Table 1.

Table 1: Potential DPRK Motivations for Acquiring Nuclear Weapons

Security	The most likely adversary being a nuclear-weapon state; complex relations with/between allies; rejection of alliances; need for deterrence against neighboring states
Status and prestige	Being seen as "a nuclear power in the East"
Domestic factors (policy, ideology)	Justification for economic problems; making nuclear-weapon status part of the Constitution
Technological progress	Mastering the technologies required for militarization of the nuclear program
Foreign-policy factors	Aspiration to neutrality; political independence; need for an instrument of deterrence vs. major powers; pursuit of foreign-policy goals
Economic considerations	Emphasis on nuclear weapons as the most economically sensible instrument of deterrence

Security was a primary motivating factor for North Korean leadership when it made a decision to initiate its national nuclear program in 1952. The DPRK faced a real nuclear threat to its security during the Korean War. Harry S. Truman, then the president of the United States, admitted the possibility of use of nuclear weapons in Korea in his speech during the press conference in

November of 1950.[25] Several months after that he authorized the transportation of nuclear bombs and deployment of atomic-capable B-29s in Okinawa. The United States conducted a series of training atomic bombings of the DPRK involving B-29s equipped with dummy or conventional bombs. “Operation Plan 8-53” was designed providing for the use of “large numbers of nuclear weapons” against China, Manchuria, and the DPRK.[26] The memories of atomic bombings of Hiroshima and Nagasaki were still very much fresh in the minds of the people of the region, so these preparations and statements were taken seriously even by the USSR and China, not to mention the DPRK. Threats emanating from new, powerful weapons might have pushed the DPRK to start and develop its own national nuclear program.

It should be noted that security threats were real at the moment when the DPRK’s national nuclear program was initiated. One of the important factors influencing the DPRK’s decision was the inequality, at the time, between the nuclear forces of the United States and of USSR, the main ally of the DPRK. Actually, the United States had a nuclear monopoly at that time. It was the only country capable of delivering a nuclear bomb to a distant target. Washington had about 300 warheads by the beginning of the Korean War,[27] while Moscow was in possession of about ten. The USSR conducted its first test of nuclear weapons only in 1949, while the United States used nuclear weapons against Japan already in 1945. Such an inequality of nuclear arsenals caused concerns not only within the Soviet leadership but also for its allies. The situation changed later, when the USSR built up its own nuclear arsenal and when China joined the nuclear club in 1964.

The **Foreign policy factor**, that is, complicated relations with allies, added to security concerns. As Russian historians point out,[28] after the liberation of Korea from the Japanese occupation, neither the USSR nor the United States were determined to give the Koreans independence and the opportunity to create their own state. Instead, they facilitated the creation of two antagonistic governments—loyal to the USSR in the North and pro-American in the South—thereby strengthening the contradictions that later led to the Korean War. After the war ended with the signing of the Armistice agreement, the big powers continued to keep Korean states in their orbit, partly out of fear of another conflict. That situation did not meet the interests of Kim Il Sung, the first president of the DPRK, who wanted his country to gain independence and did not want to play a role of “younger brother.” He partly succeeded in that. Despite formalizing allied relations with the USSR and the PRC in 1961, that alliance had nothing in common with the alliance of the United States with ROK. Non-interference of allies in the country's security, military affairs, and foreign policy were the cornerstone of the alliances of the DPRK with the USSR and China. While keeping its relative freedom and independence, the DPRK could enjoy security guarantees and a balance between its two nuclear neighbors. The DPRK’s alliance with the USSR, however, dissolved with the collapse of the USSR itself. The Treaty signed between DPRK and the PRC is still in force, but relations between the two countries have not always been smooth. Moreover, Beijing has made it clear that if the DPRK initiated an attack on the ROK, China wouldn't help the DPRK pursue such an attack. Given the fact that it is extremely difficult to confirm or deny the source of provocation in modern conflicts, one can hardly predict how an ally will behave, nor what will be the price for assistance. Neither is it possible to predict how relations between two countries will develop in the future. For the DPRK, having its own forces (including nuclear weapons) seems more secure and reliable from this point of view.

A **Technological** factor also played an important role in the development of North Korean nuclear program. The DPRK had access to advanced technologies from the very beginning of its national nuclear program. Due to the less close cooperation between the DPRK and the USSR than, say, between the United States and ROK, Pyongyang would likely receive necessary knowledge and technologies later than Seoul, and the USSR less willingly rendered assistance to the DPRK in the sphere of nuclear technologies. The ROK received a research reactor in 1957, while the DPRK

received its research reactor only in 1965. The ROK built its first nuclear power plant in 1978, while the agreement between the DPRK and USSR was only signed in 1985 and has not, to this day, been implemented. The DPRK, however, has been constantly compensating for that gap, first, with its focus on independent experiments and domestic technologies, and later by with obtaining sensitive technologies through grey and black-market schemes.

It can be suggested that the **factor of prestige** was also motivating for the DPRK ever since the moment of initiation of its nuclear program, although the program was initially associated with the acquisition and development of civilian nuclear technologies. As a former colony, Korea might have needed to break from the negative experience of the past and gain prestige in the international arena. Mastering civilian nuclear technologies was associated with industrial modernization, making it a possible route to acquiring the status of a developed country. Later, when the DPRK transferred its nuclear program to a military footing, the prestige became associated with having nuclear weapons and technologies like few big powers have—ICBMs, the hydrogen bomb—that is, being a part of a privileged nuclear club.

The DPRK arsenal has become not only a symbol of prestige but also an integral part of its **domestic policy**. The nuclear status of the DPRK was enshrined in its constitution in 2012 and plays an important role in its domestic propaganda. The nation's nuclear potential partly justifies the economic hardships the people have suffered for many years. At the same time the ability of the DPRK to develop weapons like the "big powers" and its new status as the "nuclear power of the East" engenders national pride. Due to the long-term application of skillful propaganda, based on the presence of external threat, the North Korean people are convinced that nuclear weapons prevent invasion and chaos in their Motherland, and therefore that the policy carried out by the DPRK leadership that resulted in creation of the DPRK's nuclear shield is successful and smart. Thus, nuclear weapons have become, among other achievements, a proof of the legitimacy of North Korean regime. The abandonment of nuclear weapons in such circumstances would undoubtedly have serious consequences both for security and for the image of the DPRK's leadership.

Finally, focusing on nuclear weapon may be **economically** more efficient than engaging in a conventional arms race with countries with much larger economies. Nuclear weapons serve as a deterrent against both nuclear and conventional attack. Due to country-specific factors, the DPRK's nuclear weapons program is much cheaper than that of the United States and Russia. The DPRK does not need to spend huge sums for salaries for its specialists for materials purchase. North Koreans did not develop their nuclear weapons from scratch; they were developed based on the experience of other countries, information obtained by DPRK intelligence services, and via cooperation with other state and non-state actors.

Nowadays, it is extremely difficult to single out the main motivating factor for the DPRK's acquisition of nuclear weapons. Although still considered as a priority, the security consideration has undergone transformations for decades. It is not the threat of nuclear and other direct aggression now that drives the DPRK to the nuclear path. The probability of military conflict between the United States and the DPRK even with the use of conventional weapons is arguably pretty low. Geographical position is the best military advantage and the best deterrent that the DPRK has available. Any invasion of North Korean territory would inevitably touch the interests of China and involve the participation of Russia, as Russia has close ties with China. Given the current levels of nuclear deterrent held by Russia and China, the United States would unlikely risk war with them and thus would not initiate conflict with the DPRK. The DPRK would also not be interested in starting a conflict with the United States, not just because of the inferiority of its conventional weapons and its insufficient retaliatory capabilities, but also because of fear of losing its sovereignty. Importantly, big countries—the United States, China, and Russia —are rather interested in maintaining status

quo in the region. This is the best guarantee of absence of conflict in the near-term.

At the same time the DPRK's possession of nuclear weapons guarantees that North Korean territory will not be used by big powers as a battlefield and protects its regime from both outside and inside. In the latter case the security factor is closely interconnected with factors of prestige and domestic policy considerations.

Current Stalemate

Denuclearization models

There has never been unity among the main actors involved in the Korean nuclear crisis as to how it might be resolved. From the point of the DPRK, the solution would be removing the nuclear threat from the United States.[29] Russia and China consider the Korean Peninsula nuclear issue (KPNI) as an entire complex of security problems in Northeast Asia.[30] [31] The United States[32] [33] and ROK,[34] however, recognize the DPRK nuclear issue only, and thus speak about denuclearization only of the DPRK.[35]

Based on these varied understandings of the KPNI, each country has its own vision of denuclearization. The DPRK believes that denuclearization has to be global and start with the Korean peninsula, as shown in Table 2.

Table 2: Denuclearization as seen by the DPRK[36]

US Actions	DPRK Actions
Firstly, all the nuclear weapons should be opened to public, first of all, which the United States has neither acknowledged nor denied after bringing them to the ROK. Secondly, all the nukes and their bases should be dismantled and verified in the eyes of the world public. Thirdly, the United States should ensure that it would never bring again the nuclear strike means to the ROK, which the United States has frequently deployed on the Korean peninsula and in its vicinity. Fourthly, it should commit itself to neither intimidating the DPRK with nukes or through an act of nuclear war nor using nukes against the DPRK in any case. Fifthly, the withdrawal of the US troops holding the right to use nukes from the ROK should be declared.	The DPRK will also take steps in response to it, and a decisive breakthrough will be made in realizing the denuclearization on the Korean peninsula.

The United States adheres to its complete, verifiable, and irreversible denuclearization model (CVID) providing for unilateral practical steps by the DPRK in exchange for vague promises from the United States.

There are also more flexible approaches like:

- A conditional, reciprocal, incremental denuclearization (CRID) model proposed by Chinese scholars and providing for a series of steps both by the DPRK and the United States.[37] As a result of this

approach, the DPRK would be left in possession of a small number of nuclear weapons.[38]

- Managing deterrence,[39] providing imposing quantitative and qualitative restrictions on the DPRK nuclear arsenal rather than eliminating it.
- De-militarization,[40] providing for the transfer of nuclear and missile program of the DPRK to peaceful footing.
- Reducing/dismantling the DPRK's ICBM program,[41] which provides for the DPRK relinquishing all of the ICBMs that represent a threat to the United States but keeping the rest of its capability intact, or the country keeping only the civilian component of its nuclear program.

Why don't current approaches to the DPRK nuclear issue work?

The obvious weakness of almost all of the approaches to the DPRK nuclear issue is that they provide for exact unilateral steps expected of the DPRK. At the same time the steps that must be taken by the United States are mentioned in much less specific terms. An example is shown in Table 3.

None of the approaches provide adequate explanation of the security guarantees the United States and international community would give the DPRK in exchange for its nuclear arsenal. At the same time these guarantees constitute the key element of any deal with the DPRK. "Declarations of intent" or "convincing" would not seem strong arguments for Pyongyang. Actually, vague formulations like those do not differ too much from the promise of the DPRK "to take steps" in response to exact actions expected from the United States. None of the approaches provides explanations of how the DPRK can secure its right to self-defense without nuclear weapons. It is natural for the DPRK to compensate its conventional inferiority against the United States with a nuclear deterrent. If the DPRK is deprived of this deterrent, it automatically becomes vulnerable.[42] Some propose ideas such as forming military alliances with China and/or Russia.[43] There are, however, numerous obstacles to such alliances as well as negative consequences for regional security. First, both of these countries—as well as the DPRK itself—hold negative attitudes about traditional (leader - satellites) military blocs and alliances.[44] Second, any such alliance would likely be perceived as adversarial to the US-ROK-Japan alliance, which would have troubling implications for regional security. Third, such an alliance would only deepen divisions between two Korean states.

At the same time even adequate security guarantees may appear not sufficient to convince North Korean leadership to abandon nuclear weapons. The DPRK is a typical realistic state, or *Hyper-Realist State*,***[45]*** whose leadership regards military power (rather than any alliances or partnerships) as the only guarantee of security. Nuclear weapons are an instrument of preventing a foreign military intervention and a regime change. It enables Pyongyang to assert its interests, bolster the regime, and consolidate the authority of the regime. Importantly, despite the hopes that nuclear ambitions of the DPRK depend on its regime, so once the regime changes in the DPRK, it will give up its nuclear weapons, in a country like the DPRK the regime can be changed from inside only. And any new government will be interested in maintaining its legitimacy and achieving certain goals. So it seems more logical for them to keep the nuclear arsenal, which has proven to be an efficient tool of security, domestic policy, and diplomacy.

The statements by DPRK leadership in its state media provide the following evidence:

- The DPRK prefers to rely on its own resources in protecting its national interests, providing its own defense, and pursuing its foreign policy course.
- The DPRK is trying to wring the maximum benefit from its geopolitical situation.
- The DPRK believes that peace is possible only when there is a balance of power between different

nations that is grounded in their ability to inflict unacceptable damage (ideally, mutual destruction) on each other.

These principles, on the one hand, contradict the concept of a liberal world order that puts international laws and mechanisms above the national interests of the state. The DPRK is an outsider to the "liberal" world order, and it does not recognize its rules. Nor does it trust any "guarantees" of the liberal world. On the one hand, the DPRK is not unique in this respect. Rare is the country that would adhere to international law at the expense of its own national interests and would sacrifice its security and even survival for vague promises and guarantees. Indeed, modern treaties and agreements tend to have short lives. They tend to remain in force only so long as they serve the interests of the strongest party. "Big powers" imposing rules and laws for others do not always obey these rules. It is sufficient to recall the failure of the "nuclear five" to comply with the Article VI of NPT,[46] to undertake the bad practice of dividing countries into "good proliferators" and "bad proliferators" and to apply other double standards. The nuclear five, from the point of the DPRK, do not have the moral right to impose the rules they do not obey themselves. They do not have the right to establish proliferation norms as they do not obey these norms and were the first (and the worst) proliferators leading to the current number of nuclear states. From the point of view of a realistic DPRK it would be risky to strike a deal with such an unreliable partner as the modern international community and stake its security and long-term goals on vague promises and guarantees that can be easily withdrawn.

Another weakness of the existing approaches is that they provide compensation for DPRK nuclear weapons as a means of security only. However, security, as was concluded above, is not the only and not the most important driving factor in the DPRK's development of nuclear weapons. Since nuclear weapons possession and development has become a symbol of the DPRK's prestige and an integral part of its ideology, disarmament could very well destabilize the country's leadership. If a nuclear deterrent has been created to achieve certain geopolitical goals, it is clear that the DPRK has to achieve these goals prior to any talks about denuclearization.

For the international community, from this point of view, negotiations with the DPRK on the nuclear problem will never bring any tangible result. Any talks will rather bring benefits to their most active participants, including the DPRK, rather than disarmament or other serious and meaningful shifts in the status quo.

Future Threats

It should be recognized that the instability caused by an emerging nuclear DPRK has become stable enough to become a new status quo. Scholars make the point that a nuclear DPRK has become an ideal stabilizer rather than a threat.[47] Indeed, North Korean nuclear weapons have become an integral part of regional security and of the new regional order. KPNI with the DPRK nuclear program in the center has become an essential part of the new status quo and balance of power. So, it cannot be eliminated without damage for the whole security architecture. The only possible way to denuclearize the DPRK and keep the balance is to reverse all changes and decisions put into practice under the pretext of the "North Korean nuclear threat" by the countries of the region, or at least stop all military development. This is an impossible condition. The arms race in the region and globally is continuing, and that means that the countries of the region are not interested in the settlement of the Korean Peninsula nuclear issue, and any denuclearization talks will be just talks.

At the same time, continuing old approaches and applications of pressure in dealing with the DPRK in this new reality pose threats of destabilizing security and balance of powers not only in NEA but also globally.

Though the DPRK has not yet resumed nuclear and ICBM tests, this situation cannot last forever. The DPRK has created reliable regional retaliatory potential only. In order to acquire reliable long-range retaliatory potential the DPRK needs tests, including flight tests of new missiles. The technological factor is not the only one driving the DPRK to test. The need to test may also be instigated by domestic policy and propaganda considerations. The lack of economic development and of results of diplomatic efforts must be explained by the DPRK leadership to its people, and some positive results (for example, new powerful weapon) should be demonstrated to compensate.

UNSC and unilateral sanctions have had no effect on the DPRK nuclear and missile programs. The stance adopted by the DPRK may set a further example for other countries that have also found themselves under sanctions. That result would reduce the effectiveness of this policy instrument, which already has a very questionable track record in terms of achieving its desired effect and humanitarian impacts.[48] Importantly, sanctions and pressure are not associated with the DPRK's nuclear program by North Koreans. There is a belief that the nuclear issue is used as a pretext rather than a sincere concern.[49] Sanctions are therefore considered to be aimed at the regime of the DPRK, not at its nuclear weapons.

Despite the sanctions regime, China remains the DPRK's nearly sole trading partner. The latest WPK Congress also reiterated the course to rapprochement of the DPRK with its neighbors—Russia and China. These two countries are interested in maintaining stability in the DPRK and thus are ready to support its regime. If the current negative trends in US-China and US-Russia relations continue in the future, it may lead to an emerging PRC-Russia-DPRK bloc opposite to the US-ROK-Japan alliance.

Further tensions may lead to further nuclear proliferation in NEA and beyond. The problem of nuclear proliferation associated with the DPRK is multifaceted. On the one hand, there is the very fact of acquiring of nuclear weapons by the DPRK, which is considered a proliferator. On the other hand, there is a problem of further proliferation of nuclear weapons in different ways. First, the North Korean nuclear program may give a pretext to ROK/ Japan/ Taiwan for going nuclear. We may speak only about the pretext because the true intentions, motives, perceptions of threats and adversaries differ for these countries, relative to the DPRK. Second, the DPRK may become an encouraging example for other countries under the sanctions and pressure by the international community. It has created a precedent of withdrawing from the NPT, and currently it demonstrates resistance to sanctions and defends its right and equality to the "big powers" in terms of nuclear weapons. Third, the DPRK may start selling sensitive technologies to other countries for different reasons.

The last scenario of nuclear proliferation is the most realistic and serious threat. At the same time, it would be the result of not only and not so much the nuclear status of the DPRK but rather of the attitude of other countries with respect to the DPRK's nuclear weapons status. It is not a secret that economic development is a priority goal for the DPRK. The content analysis of published statements and speeches by North Korean government proves that (see Table 4).

Table 4: DPRK Government Statements and Speeches Touching on Economic Topics

Criteria	Mentions			
	2016[50]	2019[51]	2020[52]	2021[53]
Economic development	Economy – 142 Prosperity – 24	Economy – 42 Prosperity – 8	Economy, economic – 58 Prosperity – 6	Economy, economic – 92 Prosperity – 6
Independence	Independence - 130 Juche – 110 Sovereignty – 22 Self-reliance – 14	Independence – 18 Self-reliance – 10 Juche – 10 Sovereignty – 4	Self-reliance – 18 Sovereignty – 6 Juche – 4	Independence – 16 Juche – 8 Self-reliance – 8 Sovereignty – 4
Security issues	Security – 22 Peace, peaceful – 36 War – 30 Hostile, hostility – 15	Peace – 17 Hostile, hostility – 15 Threat – 3 Security – 3	Hostile, hostility – 13 Security – 8 Threat – 6 Peace – 2	Security – 4 Peace, peaceful – 10 War - 7 Hostile, hostility – 14 Threat – 11
Military might	Power, powerful – 170 Military – 68 Defense – 33 Nuclear – 30 Strength – 28	Defense – 8 Military – 6 Powerful – 6 Strength – 6 Nuclear – 3	Power, powerful – 16 Forces – 14 Strength – 15 Nuclear – 11 Weapon – 8	Power, powerful – 50 Military – 19 Defense – 26 Nuclear – 35 Strength – 31 Forces – 42 Weapon – 19

Sources for Table 4:

2016[50]

2019[51]

2020[52]

2020[52]

2021[53]

The sanctions regime makes economic development almost impossible. The DPRK economy is kept afloat by China, which is interested in stability on its own borders. However, this contradicts the very idea of self-reliance, which is the state ideology of the DPRK regime. Dependence on economic cooperation with one country gives that country leverage and a certain power that cannot help but cause concerns for the North Korean leadership. Moreover, economic cooperation with China is pretty modest and can't help the DPRK achieve its ambitious goals. The only possible way for the DPRK to get significant financial resources in the current situation, where investments are impossible and economic cooperation is limited to one country, is to sell its nuclear and missile technologies. The nuclear weapons and missile technologies that the DPRK has developed could be of interest to other states and to non-state actors. And one of the purposes of tests and launches is to demonstrate new weapons systems to potential buyers. Kim Jong-un promised not to proliferate nuclear weapons, however, he also reserved the right to take all necessary steps "to protect the supreme interests of the state."[54] Supreme interests may mean ordinary national interests, including economic development. The need for resources to bolster this development may become one of the potential motivations for nuclear and missile proliferation by the DPRK.

Conclusion

Despite its famous nuclear ambitions, the DPRK does not oppose the idea of denuclearization. On the contrary, this idea was voiced by Kim Il Sung and Kim Jong Il and has been reiterated by Kim Jong Un. Particularly, it is enshrined in the Article 9 of the country's Law on Consolidating Position of Nuclear Weapons State.[55] Kim Jong Un could also be quite sincere when he told then US Secretary of State Mike Pompeo that he did not want his children "to carry the nuclear weapon on their back their whole life." But since the DPRK nuclear program is a result of complex of security problems in NEA, it is logical that the DPRK may consider abandoning its nuclear path only if these problems are solved. That is what North Koreans mean when speaking about global denuclearization. As global denuclearization is nearly impossible, the adherence of the DPRK to idea of denuclearization demonstrated via official statements and vague promises "to take steps" (which are mistakenly perceived as a real intent to disarm) seem to be just a bargaining chip for negotiations with the international community. The DPRK is mirroring the perceived unfair game of the international community. And the international community seems to accept this game (otherwise it would try to apply alternative approaches to negotiate with the DPRK).

While the talks for talks are going on, however, it is important to focus on more urgent issues. By focusing solely on the denuclearization of the DPRK, the international community risks missing other, more serious problems for the global nuclear non-proliferation regime. Under present conditions, preventing further proliferation, which is more possible and feasible, should be prioritized over the attempts to reverse the irreversible—that is, to reverse the nuclear status of the DPRK. The task of the international community is to freeze nuclear proliferation at the current level, in other words, to make the DPRK the last state to acquire nuclear weapons.

As for the DPRK, it will only be possible to speak about reduction of and control over its nuclear weapons. Its current policy of creation of diverse and multiple nuclear weapons suggests that in the future the DPRK will be ready to sacrifice some of them, keeping the most powerful and efficient systems in its current arsenal. However, the DPRK's nuclear status will not be discussed. It has already become an integral part of the new world order and balance of power in the region. Forced (the only option as there will be no voluntary) disarmament of the DPRK would inevitably disrupt the fragile balance of power in the region and the region's peace.

III. ENDNOTES

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Nautilus Institute
608 San Miguel Ave., Berkeley, CA 94707-1535 | Phone: (510) 423-0372 | Email:

nautilus@nautilus.org