



PERSPECTIVES

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North Korea at a Nuclear Crossroads

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EXECUTIVE SUMMARY: EXECUTIVE SUMMARY: North Korea has found itself at a nuclear crossroads more than once, but the Trump-Pompeo-Bolton triumvirate significantly alters the current dynamic. The primary external forces acting on Pyongyang's nuclear decision-making are China, Iran, and the US. The Americans could well prove effective against an aggressively antagonistic Iran.

Although this is not the first time North Korea finds itself at a nuclear crossroads, the present case is different. Notwithstanding some inconsistent remarks made recently by President Donald Trump and his NSA, John Bolton, the triumvirate formed by Trump, Bolton, and Secretary of State Mike Pompeo is a powerful integral, and one to give Kim Jong-un pause.

The February 2019 summit between Trump and Jong-un ended with no agreement, indicating real difficulty in making progress toward denuclearization of the north. There are at least three layers to the issue. First: what will be the price for Pyongyang's agreement to comprehensive, complete denuclearization? Second: does North Korea really intend to implement such an agreement? And third: if it does not, will noncompliance be detected by intelligence communities and tackled effectively?

Shortly after the unsuccessful summit, a remarkable series of events took place:

- On April 25, Kim Jong-un went to Russia and met with Putin.
- On April 27, Iran's state television reported that FM Muhammad Javad Zarif is planning to visit North Korea (no date was given).
- In mid-May, Zarif visited Russia, Japan, China, and India (but not North Korea).
- On May 9, North Korea fired two short-range missiles following a drill

- the first such incident in 18 months.
- On May 25, Trump visited Japan.

On the occasion of the missile firing in May, Trump commented: “I have confidence that Chairman Kim will keep his promise to me.” Iran Press (seemingly quoting a statement carried by the NK Central News Agency) waded in, announcing that giving up test firings would amount to relinquishing North Korea’s right to self-defense. (The same mantra is endlessly used by Iran to justify its own ballistic tests, including the one conducted in December 2018 with a medium-range ballistic missile that had the capability of carrying multiple warheads and a range that would allow it to strike any location in the Middle East as well as parts of Europe).

The first Trump/Kim summit, which took place in Singapore in June 2018, appeared to be a success. It concluded:

Chairman Kim Jong-un reaffirmed his solid and unwavering commitment to complete denuclearization of the Korean peninsula. Convinced that the establishment of new US/DPRK relations will contribute to the peace and prosperity of the Korean peninsula and of the world, and recognizing that mutual confidence building can promote the denuclearization of the Korean peninsula...the DPRK commits to work toward complete denuclearization of the Korean peninsula.

This was a clear-cut and promising formulation.

The second summit was fruitless, and the gap between the two – in terms of both expectations and results – is of paramount geostrategic importance.

The primary external forces acting on Pyongyang’s nuclear decision-making are China, Iran, and the US. Russia and Japan are regarded as secondary influences.

China

Right after Pyongyang’s nuclear test in January 2016, tensions grew between China and North Korea. In February 2016, China and the US introduced new sanctions against North Korea, and China has since maintained that position.

Nonetheless, between March 2018 and January 2019, Kim Jong-un visited China four times to meet Xi Jinping (after four years of no face-to-face contact). The first visit took place just two months after President Trump assumed office. At that meeting, Xi urged Kim to strengthen their two countries’ strategic and diplomatic future partnership, and Kim made similarly conciliatory remarks.

Kim and Xi’s second meeting in May 2018 was a month before the Singapore summit. The two leaders discussed how to cooperate (“at the communist level”) on denuclearization and peace on the Korean peninsula. At the same

time, Trump was demanding that China continue to cooperate with the American economic sanctions on Pyongyang until it permanently dismantles its nuclear weapons and intercontinental ballistic missile programs.

The two leaders met again in China on June 12, 2018. At that meeting, Kim is thought to have sought Xi's advice about a negotiation strategy between North Korea and the US.

Most recently, Kim spent four days with Xi in Beijing starting on January 7, 2019. The trip was ostensibly in honor of Kim's 35th birthday, but it is believed that Kim was briefing Xi on the upcoming summit with Trump and seeking advice. The interface between Pyongyang and Washington, particularly Trump, was the main topic, within the context of denuclearization of the Korean peninsula.

Generally speaking, China has long opposed North Korea's decision to withdraw from the NPT, and has expressed its desire for a nuclear-free Korean peninsula. It voted to refer North Korea's noncompliance to the International Atomic Energy Agency. It can be assumed that China (and Russia), despite the backing they give to Pyongyang, support the denuclearization of North Korea. They have no desire to see a military clash between the US and North Korea so close to their borders.

There is one state, however – probably the only state in the world – that opposes the complete denuclearization of North Korea. That state is Iran.

Iran

On August 7, 2018, in the midst of faltering talks between Pyongyang and Washington over denuclearization, North Korea's FM, Ri Yong-ho, arrived in Tehran. Ri highlighted Pyongyang's satisfaction with the resilient friendship between the two states. "We are very content with developing relations between Iran and North Korea," he said, "while we are both experiencing similar problems under US sanctions. Dealing with Americans is difficult, and as our main goal is total disarmament of the whole Korean peninsula, it is necessary that the Americans also abide by their commitments, but they refuse to do so. Although [Pyongyang] has agreed on disarmament to deliver on its commitments in negotiations with the US, we will preserve our nuclear science, as we know that the Americans will not abandon their hostility toward us." The term "science" is obviously a broad one.

North Korea and Iran rely on each other and act as one in various cardinal respects. In view of the political and economic pressures they face, as well as the difficulties resulting from prohibitions on military technologies, they regard their military resources – particularly the nuclear and ballistic – as common assets. The two states seek an optimal means of jointly classifying, pooling, and protecting those assets, a message underlined by Ri's visit.

Iran is not supposed to develop nuclear weapons, including ballistic missiles, and North Korea is expected to get rid of its existing nuclear arsenal, related facilities, and ballistic missiles. Both countries still view nuclear weapons, particularly ballistic missiles, as vital assets. They both possess meaningful infrastructures and knowhow. A complex equation is thus formed in which the two countries are trying to act as a nearly autonomous unit.

This is how they ought now to be viewed and approached. Given their present obligations, Tehran and Pyongyang are jointly mobilizing to minimize the loss of common assets while avoiding military confrontation with the US and assuring both regimes' survival. The countries are selecting North Korean assets that can be "sacrificed" in order to appease the US. Their object is to hold onto such assets as would allow Pyongyang to retain, and Tehran to procure, actual nuclear weapons capabilities.

A host of North Korea's nuclear-related assets, in addition to operational weaponry, that are meant to be eliminated or controlled might instead be concealed within the country or sent – assembled or not – to Iran, where they will be warmly welcomed. The absence of a land border between the two countries makes camouflaged transportation from NK to Iran complicated and risky, but they can be expected to do their utmost to overcome that disadvantage.

Indeed, on December 7, 2018, when the third Kim-Xi meeting started, senior Iranian parliamentarian and former chairman of its national security and foreign policy commission (until June 2018), Alaeddin Boroujerdi, conferred with North Korea's director of the foreign policy committee of its Supreme Assembly, Ri Su Yong, in Pyongyang. This meeting took place after the US had officially reinstated sanctions against Iran, and the main topic was how to cope with those sanctions. Discussions were held also with the president of NK's supreme assembly, its higher education minister and its deputy foreign trade minister.

A few days after the meeting, Boroujerdi met the North Korean ambassador for follow-up talks in Tehran at which both parties stressed the "need for cooperation between Iran and North in various fields, so as to reduce the effects of US sanctions." Probably the most important of those fields is military-related nuclear technologies.

Pyongyang's military nuclear assets reflect a prolonged endeavor instigated by Kim Jong-il and amplified by his son, who took power in April 2012. The first nuclear test under Kim Jong-un, in February 2013 (and the country's third nuclear test overall), involved a highly enriched uranium core nuclear device, as, presumably, did the next two nuclear tests in 2016. These differ from earlier plutonium-core based field tests.

Mohsen Fakhrizadeh-Mahabadi is director of the Iranian nuclear weapons

project, which relies chiefly on highly enriched uranium, not plutonium. He, together with a delegation of Iranian nuclear experts, was covertly present at the 2013 test.

The nuclear Pyongyang-Tehran nexus has since tightened, enabling a potentially expedient – if largely unverifiable – convergence with the Iranian nuclear project. Information exchanges and delegation visits reportedly took place, aimed at planning nuclear warheads. These include four North Korean delegations to Iran before June 2015, one month prior to the completion of the Iran nuclear deal. It may be noted that in August 2015, a new gas centrifuge hall became operational in North Korea's main uranium enrichment facility. At the same time, there was convergence in the development and field-testing of ballistic missiles by the two countries, particularly devices that are capable of carrying nuclear warheads.

In September 2012, shortly after Kim Jong-un became ruler of North Korea, a significant event took place. Daneshjoo, then Iranian minister of science and technology, signed an agreement of cooperation with Pyongyang. No details were provided except that the agreement would include: "Setting up joint scientific and technological laboratories, the exchange of scientific teams, and the transfer of technology in the fields of information technology, energy, environment, agriculture and food." The memorandum of agreement was ratified by Ali Akbar Salehi, head of Iran's atomic energy organization.

Iran's Supreme Leader, Ali Khamenei, has since clarified that the agreement is an "outcome of the fact that Iran and North Korea have common enemies, because the arrogant powers do not accept independent states." It is reasonable to infer that the agreement went far beyond its alleged civilian sphere. While the Iranian heavy water plutonium production reactor differs from the North Korean gas-graphite reactor, uranium enrichment routes in both countries are based on the gas centrifuge technique. Iran seems to be ahead of North Korea, particularly in the development and manufacture of advanced centrifuges with carbon fiber rotors, and can therefore provide assistance to North Korea in this area.

The parallels between the North Korean and Iranian nuclear and ballistic programs are remarkable. In 2015, Admiral Bill Gortney, head of the US Northern American Aerospace Defense Command, noted that Pyongyang had already developed miniaturized nuclear bombs that can be fitted to ballistic missiles. Concurrently with this development, a similar adjustment was accomplished with the Shehab-3 missile, the Iranian version of the North Korean Nodong-1.

Further, Iran and NK upgraded the Shehab-3/Nodong-1 liquid-fueled motor missiles in a quite similar, though not identical, fashion, with Iran producing the Ghadr (range 1,600km - 995mi) and Emad (range 1,700km-1,056mi)

derivatives. In addition, components of the liquid-fueled motor missile Musudan (also called the BM-25), which has a range of 2,500-4,000km and was successfully field tested in North Korea in 2016, have been supplied to Iran by Pyongyang. The more advanced solid-fueled motor technology, which included the North Korean KN-11 submarine-launched ballistic missile and the Iranian Sajjil missile (range 2,000km), was apparently developed collaboratively. Also, a new North Korean ballistic missile test site was revealed in 2016 in Guemchang-ri – and it closely resembles the Iranian ballistic missile test site near Tabriz.

The two countries will certainly strive to clandestinely retain vital portions of NK's assets, keeping them hidden in one country or the other, or in both. In all likelihood, they are currently looking for ways to expedite this. Given the depth of the relationship, Pyongyang is likely to maintain its cryptic interface and strategic cooperation with Tehran regardless of the state of its relationship with the US.

The US

The US intelligence community has tracked North Korea's activities in the nuclear and ballistic spheres for years, taking particular note of the conjunction of those spheres and Kim Jong-un's increased interest. In June 2017, at a hearing before the US House Armed Services Committee, the head of the US Missile Defense Agency, Vice Admiral James Syring, said: "The advancement and demonstration of technology of ballistic missiles from North Korea in the last six months have caused great concern to me and others. It is incumbent on us to assume that North Korea today can range the US with an ICBM carrying a nuclear warhead." Concurrently, the US Defense Intelligence Agency estimated that NK might possess up to 60 nuclear warheads.

In September 2017, President Trump issued Executive Order 13810 allowing the US to cut from its financial system or freeze the assets of any companies, businesses, organizations, or individuals trading in goods, services, or technology with North Korea. Any aircraft or ship that enters North Korea is banned from entering the US for 180 days. The same restriction applies to ships that conduct ship-to-ship transfers with North Korean vessels. Treasury Secretary Steven Mnuchin said, "Foreign financial institutions are now on notice that going forward they can choose to do business with the US or North Korea, but not both." The White House said: "Foreign financial institutions must choose between doing business with the US or facilitating trade with North Korea or its designated supporters."

The Trump administration's moves are undoubtedly having an economic impact on North Korea.

On returning to the US from the Singapore summit on June 13, 2018, Trump

stated that North Korea was no longer a nuclear threat. On June 22, however, he extended Executive Order 13466 of 2008 by one year, reaffirming: “The current existence and risk of the proliferation of weapons-usable fissile material on the Korean peninsula constitute an unusual and extraordinary threat to the national security and foreign policy of the US, and I hereby declare a national emergency to deal with that threat.”

The New York Times reported in September 2018 that “North Korea is making nuclear fuel and building weapons as actively as ever” but is doing so quietly, “allowing Mr. Trump to portray a denuclearization effort as on track.” The *Times* reported two months later that North Korea appeared to be engaged in a “great deception” by offering to dismantle one missile base while developing 16 others. The paper indicated that this expansion program, the existence of which contradicted Trump’s assertions that his diplomacy was yielding results, was long known to American intelligence.

In November 2018, Pyongyang repeated its demand that American economic sanctions be lifted as a condition of proceeding with talks. The Trump administration continued to insist that North Korea make concessions first. Meetings between Secretary of State Pompeo and North Korean officials were scheduled, canceled, then rescheduled. VP Pence and Japanese PM Abe reaffirmed the need to maintain sanctions on North Korea in order to achieve denuclearization.

The US was supposed to receive a list of NK nuclear sites, weapons, production facilities, and missile bases, but North Korean officials told Pompeo that that would amount to giving him a “target list.” American officials replied that they already have a detailed target list that goes back decades, but want to use Pyongyang’s information to determine whether it reveals all facilities and is moving honestly toward denuclearization. Remarkably, American intelligence officials also said that North Korea’s production of nuclear material, new nuclear weapons, and missiles that can be placed on mobile launchers and hidden in mountains at secret bases has continued.

US academic analysts furnished more details. A November 2018 report revealed that they had located 13 secret North Korean facilities that develop and produce ballistic missiles and related technologies. Nuclear or any other warheads can be tipped within each of those facilities. The report drew on updated satellite imagery supplemented with interviews by North Korean defectors and government officials around the world. Although the sites are not launch facilities and in some cases are rudimentary, they are hidden and illustrate both the scope of Pyongyang’s weapons program and its determination to conceal its military might.

The dispersed locations of these bases, combined with extensive camouflage, concealment, and deception, are designed to maximize the likelihood that these

missile units will survive attack. A map of North Korea in the report shows three belts of missile bases. They range from short-range tactical placements, to sites with midrange missiles that could strike most of South Korea, Japan, and US bases in the Pacific, to strategic placements of missiles that can threaten US shores.

A statement from the US State Department said Washington wants the sites dismantled: "President Trump has made clear that should Chairman Kim follow through on his commitments, including complete denuclearization and the elimination of ballistic missile programs, a much brighter future lies ahead for North Korea and its people."

Top American intelligence officials testified to Congress in January 2019 that it is unlikely North Korea will fully dismantle its nuclear arsenal. Trump's NSA Bolton continues to believe Pyongyang cannot be trusted and that denuclearization efforts will fail. Stephen Biegun, US special representative for North Korea, repeated the official US stance that sanctions on Pyongyang will not be lifted until it has fully denuclearized. He indicated, though, that US negotiators might not demand a full inventory of North Korea's nuclear and missile programs as a first step, a demand Pyongyang has been resisting.

Wide gaps between the two countries persisted up to the fruitless Hanoi summit, including over the precise definition of denuclearization – the core term.

President Trump said, "Basically, they wanted the sanctions lifted in their entirety and we couldn't do that. We had to walk away from that particular suggestion. We had to walk away from that." Hours later, in a rare move, North Korean officials called a news conference at which FM Ri Yong-ho offered a different account of his country's position, stating that Pyongyang had proposed only a partial lifting of sanctions. Out of 11 UN sanctions, Ri said NK wanted only the five sanctions originally imposed in 2016 and 2017 lifted. In exchange, Ri offered to "permanently and completely" dismantle its prime nuclear facility in Yongbyon and permit American experts to observe. Ri also proposed putting in writing that North Korea would end all nuclear and long range missile tests. He concluded, however, that Pyongyang saw that no agreement could be made after the US demanded one further measure in addition to the destruction of the Yongbyon nuclear facility.

On the second day of the summit, it was reported that US negotiators had dropped their demand for a detailed inventory of North Korea's nuclear and missile programs.

American experts estimated in 2017 that about 100-150 entities and 9,000-15,000 people are involved in North Korea's research, development, testing, production, and stockpiling of nuclear weapons. This means that destroying

the Yongbyon facility, a major plutonium installation, would be inconsequential, as the North Korean uranium path has become the more important route for nuclear weapons production in North Korea (and potentially Iran). Last May, Iran announced that it has quadrupled – for the time being – its production of low-enriched uranium. The US will have to make a great effort to deprive Pyongyang of its nuclear-tipped intercontinental ballistic missiles capacity, and even more to deprive it of nuclear weapons already threatening South Korea and Japan.

Conclusion

Though Kim Jong-un has become entangled in a complex geopolitical situation, he has options. He can go for a polar decision – either refraining from or sincerely committing to full denuclearization – or a maneuvering decision that would enable North Korea to clandestinely try to retain certain military nuclear capabilities while signing a comprehensive divestment agreement. In the next three to six months, Kim will have to formally shape, announce, and face the consequences of his choice. The third option – a maneuver – is the most probable. It would be a variation of past manipulation. The American triumvirate, Trump, Pompeo, and Bolton, is likely strong enough to cope effectively with an untrustworthy North Korea.

The personal interfaces between Kim and Xi and Kim and South Korean president Moon Jae-in may well have desirable, perhaps even crucial, influence, though at different levels. Collectively, these influences – possibly strengthened by Putin – could generate a positive shift in Kim's conduct. He will certainly be affected by them one way or another, but Iran will surely endeavor to hamper any such shift.

This paper is based on an article by Dany Shoham, published in the April 2019 issue of the magazine CBRNe World.

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