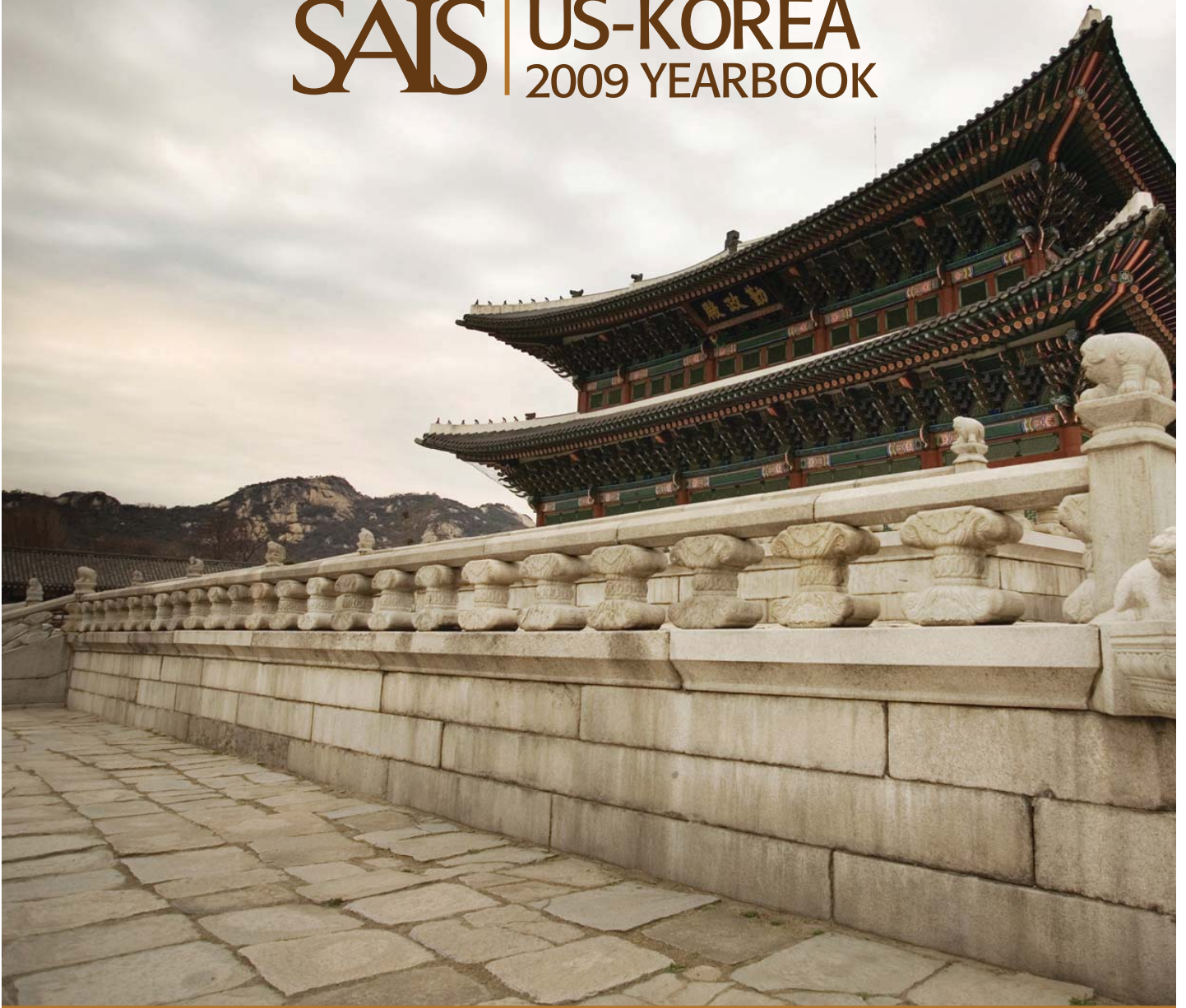


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NORTH KOREA'S DENUCLEARIZATION: THE CHALLENGE OF BREAKING THE CYCLE OF MISTRUST

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I. INTRODUCTION

Years of multilateral efforts aimed at halting North Korea's nuclear programs have failed to produce lasting results. In 2009, the goal of denuclearizing North Korea proved elusive yet again.

The year 2009 began on the heels of a major setback. In December 2008, the Six-Party Talks aimed at denuclearizing North Korea broke down due to disagreements over how to verify nuclear information provided by North Korea. The collapse of the December talks came to mark the latest in a series of diplomatic failures intended to end North Korea's nuclear development.

While there was a period of relative calm between the United States and North Korea in the period leading up to and immediately following the inauguration of U.S. President Barack Obama, that changed abruptly in the aftermath of North Korea's rocket launch on April 5, 2009. The launch was condemned immediately by the UN Security Council. North Korea reacted angrily to the United Nations' censure, rejecting future Six-Party Talks and expelling international nuclear inspectors from the country. In May, it carried out a second nuclear test, ignoring international pressure to refrain from the test.

Since summer of 2009, however, North Korea has begun peace initiatives termed by some as a "charm offensive," which culminated in the December 8-10 trip to North Korea by U.S. Special Representative for North Korea Policy Stephen Bosworth. Early indications suggest that the first official high-level contact between the two countries since President Obama took office is likely to be only the first step towards the resumption of the formal denuclearization process.

Why did the Six-Party Talks break down, and why did tensions increase in the first half of 2009? Now that the mood in Pyongyang appears to have changed, are North Korea's current gestures for dialogue sustainable?

This paper attempts to answer those questions by examining the major events associated with North Korea's nuclear development since last year through public comments and actions by the main parties involved. It argues that mutual mistrust between the United States and North Korea has played a major role in the collapse of the denuclearization process and the concomitant increase in tensions in the first half of 2009.

It also addresses North Korea's various nuclear programs in an attempt to assess how far North Korea has progressed in reversing all that was accomplished during the "disablement" phase of the denuclearization process since the collapse of the December 2008 talks.

The paper starts with a quick overview of the process that led to the deadlock of the Six-Party Talks by the end of 2008. It then turns to the North's rocket launch and nuclear test in early 2009, to examine the role that mutual mistrust played in heightening tensions between the United States and North Korea. It then analyzes North Korea's nuclear programs in an effort to gain an understanding of the challenges ahead for denuclearization efforts. Finally, it concludes with the significance of the visit to North Korea by Bosworth in December 2009 from the point of view of avoiding misinterpretations and misunderstandings, and warns about the continuing danger of mistrust triggering dynamics that negatively affect any future denuclearization efforts.

II. THE COLLAPSE OF THE SIX-PARTY TALKS

Even before they began, the December 2008 denuclearization talks that involved the two Koreas, the United States, China, Japan, and Russia appeared to be headed for failure. On one side were the United States and its allies Japan and South Korea calling for the sampling of North Korea's nuclear sites in order to verify nuclear information submitted earlier by North Korea. On the other side of the dispute were the North Koreans, who rejected the measure as being overly intrusive.

Although there was no written record, the United States insisted that North Korea had orally agreed to the collection and analysis of samples in a bilateral

meeting in October. The North Koreans denied U.S. assertions and in a statement carried by the official Korean Central News Agency (KCNA) on November 24, 2008, noted that their understanding related to verification was that it was to be accomplished through field visits, the confirmation of documents, and interviews with technicians, but that sampling *per se* was not involved.

Bilateral talks to bridge the differences were held in Singapore in December 4-5, 2008, ahead of the Six-Party meeting. U.S. Assistant Secretary of State for East Asia and Pacific Affairs Christopher Hill and North Korean Vice Foreign Minister Kim Kye-gwan failed to narrow the gap, and the multilateral talks that began three days later in Beijing predictably ended without any progress.

The disagreement over sampling was a clear demonstration of the extent of mutual mistrust that exists between North Korea and the United States. At the core of the dispute was the fact that sampling, as part of the verification process, was never clarified in any of the agreements reached in the Six-Party Talks. A document covering verification, released by China after the six countries met in July 2008, for example, states they will “include visits to facilities, review of documents, interviews with technical personnel and other measures unanimously agreed upon among the six parties.”

The North Koreans interpreted the push for the sampling provision as yet another example of “hostile policy” by the United States. North Korea underscored that position in the November 24, 2008, KCNA statement, which stated, “The DPRK and the U.S. are still technically at war. To demand what is not mentioned in the written agreement between the two sides while refusing to take the present level of confidence between them into consideration is an infringement upon sovereignty as it is little short of seeking house search.”

Driven by a high level of mistrust, however, the United States insisted that sampling should be a part of the verification process. Washington asserted that North Korea had orally agreed to the collection of samples and their removal from the country for analysis.

Their disagreement had not narrowed by the end of the year. The stalemate was further complicated by the election of a new president in the United States and the illness of North Korean leader Kim Jong-il, which led to debate over possible succession in the country. The year 2008 ended with the Six-Party Talks teetering towards collapse.

III. THE ROCKET LAUNCH AND NUCLEAR TEST

The United States and North Korea started the year 2009 by refraining from major initiatives on an official level as they made their respective adjustments after the January 20, 2009, inauguration of U.S. President Obama.

North Korea appeared to be in a wait-and-see mode as to how to best evaluate the policy direction the new U.S. administration would take towards North Korea. During this time, Pyongyang refrained from using any provocative expressions in their public remarks. North Korea, for example, struck a notably less confrontational tone against the United States in its annual joint editorial that appears in North Korea's three newspapers on New Year's Day. The editorial, which serves as the country's policy statement, refrained from such phrases as "imperialist forces" to refer to the United States and its "hostile policy" against North Korea—phrases used in the past.

At the same time, North Korea sent messages to the United States through public statements. After keeping silent about the nuclear issue for almost a month after the breakdown of the Six-Party Talks, in the months leading up to President Obama's inauguration North Korea issued successive statements that in essence said that it would not give up its nuclear weapons until there is no threat from the United States. In doing so, North Korea refrained from using any of the usual confrontational expressions.

North Korea also embarked on a minor engagement initiative, inviting U.S. scholars and former U.S. diplomats to visit North Korea, in what appears to have been a further attempt to gauge the direction of U.S. policy and perhaps influence it. The first visit took place in January by Selig Harrison, director of the Asia program at the Washington-based Center for International Policy. That visit was followed by a trip in February by a Stanford University group led by professor emeritus John Lewis. The Lewis trip in turn was followed by a visit that included former ambassadors Bosworth and Morton Abramowitz. (Bosworth had not at the time been named as U.S. special representative.)

All of the scholars and former officials met with North Korean Foreign Ministry officials during their respective trips. During their visits, North Korea relayed the message that while Pyongyang is committed to the denuclearization of the Korean Peninsula, Washington must treat it as a nuclear weapons state until further progress is made in relations.

The Start of the Vicious Cycle

The relative calm changed dramatically in the aftermath of North Korea's rocket launch on April 5, 2009.

North Korea launched the rocket from a facility located at Musudan-ri in the country's northeast and maintained that it was launching a satellite into orbit. The window of the launch, designated between April 4-8, offers an insight into the significance of the event for domestic politics. For on April 9, the Supreme People's Assembly, the country's parliament, was scheduled to meet for its once-in-five-years gathering. The launch of the rocket was intended to boost morale ahead of the meeting, at which North Korean leader Kim Jong-il was expected to be reelected as chairman of the powerful National Defense Commission.

Moreover, given the emphasis North Korea is placing on science and technology as part of its economy, it is logical to assume that the rocket launch was also a symbolic message to the domestic public to keep morale high while the nation worked to bolster its dismal economy on its path towards achieving its stated goal of realizing "a powerful and prosperous state" in 2012. Even if other factors may have come into play—for example, North Korea's desire to bolster its missile technology to use it as a bargaining chip with the United States—events following the rocket launch demonstrate that there were clear domestic reasons for the launch.

In the North Korean mindset, the North Korean government had done everything that was necessary to prepare for the launch. It had reported the plan to relevant international authorities, namely the International Civil Aviation Organization and the International Maritime Organization, in accordance with their requirements for member countries to inform them of such launches to ensure the safety of planes and ships. It had also warned that if Washington took the issue to the UN Security Council, it would regard it as yet another hostile act intended to bring down the North Korean government. According to a *Minju Joson* commentary carried by the KCNA on April 1, 2009, the discussion surrounding the rocket at the U.N. Security Council "would mean the collapse of the Six-Party Talks and everything achieved until now in the process for the denuclearization of the Korean Peninsula (would) come to naught."

But the United States saw the issue differently. President Obama had warned North Korea there would be consequences should they go ahead with the missile launch, which many countries viewed as a test of its ballistic missile technology.

True to its word, in the aftermath of the test, the United States played an instrumental role in the issuing of a UN Security Council presidential statement condemning the launch.

The vicious cycle was now in place. North Korea, perceiving the condemnation of the rocket firing as an attack on its system, reacted angrily. It called the UN censure a hostile act being perpetrated by the United States and its allies. In retaliation, it terminated all nuclear disablement activities at their nuclear complex in Yongbyon on April 14, 2009, and expelled both the U.S. nuclear experts, who were there to assist the disablement process, and the inspectors from the International Atomic Energy Agency (IAEA) who had been rotating in and out of North Korea since July 2007.

North Korea made its position towards the Obama administration clear on May 8 by voicing its first public criticism against it. A Foreign Ministry spokesman was quoted by the day's KCNA dispatch as saying that Pyongyang believed the United States remains committed to destroying the country's ideology and bringing down its system of government. "Nothing," a KCNA spokesman was quoted as saying, "would be expected from the United States which remains unchanged in its hostility towards its dialogue partner."

Believing it was under siege, North Korea retaliated again later in May, this time taking an even stronger measure. It detonated a nuclear device for the second time on May 25, 2009, near the small village of Punggye-ri, in the northeastern province of North Hamgyong. The test was quickly condemned by the UN Security Council, which adopted Resolution 1874 to strengthen sanctions against North Korea for the underground explosion.

IV. WAR OF WORDS

The confrontation between the United States and the North Koreans became visible in many ways, particularly in public comments made by the two sides.

Both the United States and North Korea—although more so for Pyongyang than Washington—are known to track each other's public remarks closely, in an attempt to gauge each other amid a lack of regular official contact. An exchange of hostile words began when U.S. Secretary of State Hillary Clinton likened North Korea's rocket launch to the actions of small children and attention-seeking teenagers. "What we've seen is this constant demand for attention,"

Clinton said in a media interview in July. “And maybe it’s the mother in me or the experience that I’ve had with small children and unruly teenagers and people who are demanding attention—don’t give it to them, they don’t deserve it, they are acting out.”

North Korea immediately shot back. “We cannot but regard Mrs. Clinton as a funny lady as she likes to utter such rhetoric, unaware of the elementary etiquette in the international community,” a North Korean Foreign Ministry spokesman said in a statement carried by the official media. “Sometimes she looks like a primary schoolgirl and sometimes a pensioner going shopping.”

With the war of words, U.S.-North Korea relations hit another low by the time summer began.

V. NEW INITIATIVES

A turning point to the downward spiral came in August. Former U.S. President Bill Clinton visited Pyongyang in an effort to rescue two American journalists who had been apprehended in March in the vicinity of North Korea’s border with China.

North Korea is known to place importance on high-level visits to North Korea, including those by former officials, perhaps because of the importance it attaches to its own leadership. An indication of the gravity North Korea attached to former President Clinton’s visit can be gauged by the fact that Kim Jong-il himself met with former President Clinton, as well as by the wide coverage of the event in North Korea’s state-run media.

A “charm offensive” began following Clinton’s visit. The glimmer of possibility for the resumption of the Six-Party Talks first emerged following Chinese Premier Wen Jiabao’s visit on October 5, 2009. In his meeting with Premier Wen, North Korean leader Kim stated the possibility of denuclearization once again. A KCNA report on October 5, 2009, quoted the North Korean leader as saying that “the denuclearization of the peninsula was the behest of President Kim Il-sung.” Such comments are significant, as words of Kim Il-sung, the founder of the country, continue to play a highly important role in the formulation of policy in North Korea. Also, Kim Jong-il indicated that Pyongyang would return to the Six-Party Talks if its bilateral talks with Washington produce positive outcomes.

U.S. Special Representative Bosworth's visit to North Korea on December 8-10, 2009, appeared also to be a step directed towards the resumption of the Six-Party Talks. Bosworth handed North Korean Vice Foreign Minister Kang Sok-ju, a key figure behind the country's foreign policy, a letter to Kim Jong-il from U.S. President Obama. At a press briefing after his visit to North Korea, Bosworth stated that Pyongyang had recognized the importance of the Six-Party process. He added, however, that a date for the next round of talks had yet to be set.

VI. ISSUES OF DENUCLEARIZATION

North Korea's Reversal of Disablement

Even if the Six-Party Talks resume, a host of challenges lie ahead. One of these would be to deal with the reversal of the disablement measures that had been taken at the nuclear complex in Yongbyon, located about 120 kilometers northeast of capital Pyongyang. The Yongbyon nuclear complex is at the heart of North Korea's nuclear capability. In this complex, nuclear fuel rods are produced, irradiated in a reactor, and then reprocessed to extract plutonium. Since becoming operational, the Yongbyon complex is believed to have produced sufficient weapons-grade plutonium for four to eight atomic weapons, depending on estimates.

When the disablement process was halted on April 14, 2009, North Korea had been removing spent nuclear fuel rods from the reactor in the complex. Of the 8,000 nuclear fuel rods that were in the reactor, about 6,500 had been removed and put in an adjacent cooling pond for storage until a decision was made about how to deal with them.

An independent analysis about how much of the disablement measures North Korea reversed is extremely challenging, as international inspectors have been expelled from the country. North Korea, however, announced on November 3, 2009, that it has taken out all of the fuel rods and extracted plutonium from them. A KCNA report on that day stated that North Korea has "successfully completed the reprocessing of 8,000 spent fuel rods by the end of August."

While there was no mention of the amount of plutonium that was produced through the operation, Siegfried Hecker, co-director of the Center for International Security and Cooperation at Stanford University and a former director of the Los Alamos National Laboratory, estimated in an interview with

the author that the amount of plutonium is likely to be around 8 kilograms, or about one and a half bombs' worth of the substance.

Whether North Korea has begun taking other steps to reverse disablement measures remains an open question. North Korea could, for example, begin preparing for more plutonium production by reloading the reactor. There are approximately 14,000 fresh fuel rods stored at Yongbyon that could be utilized at its 5-megawatt reactor.

Admission of the Uranium Enrichment Program

Another, perhaps bigger, challenge would be addressing the issue of North Korea's uranium enrichment programs. In June, North Korea reversed its past denials and admitted to developing a uranium enrichment program, another route to obtain fissile material. The June 13, 2009, statement by the North Korean Foreign Ministry said that "pursuant to the decision to build its own light-water reactor, enough success has been made in developing uranium enrichment technology to provide nuclear fuel to allow the experimental procedure."

The remarks suggest that uranium will be enriched to provide fuel for its yet-to-be-built light-water reactors. Light-water reactors use low-enriched uranium (LEU) as fuel to produce nuclear energy. While LEU is not an ingredient for nuclear bombs, a facility that manufactures it can produce highly enriched uranium (HEU), which is a weapons-grade substance that has 90 percent concentration of uranium-235.

North Korea's suspected uranium enrichment program has been the source of a dispute between the United States and North Korea in the past. In October 2002, U.S. officials confronted the North Koreans with information that North Korea had imported aluminum tubes needed for the program. The ensuing discord over whether the North Koreans admitted to the program or not in that meeting led to the collapse of the 1994 Agreed Framework between the United States and North Korea and led to the second nuclear crisis.

According to Hecker, given the complex technology and equipment involved in uranium enrichment, it is doubtful that North Korea had begun the effort only over the last couple of months. His comments suggest that while North Korea has continuously denied trying to develop the uranium enrichment program until very recently, it is more probable that the efforts began some time ago.

The first and foremost advantage of the uranium program is its size. The structure is typically far smaller than that of the plutonium program. It could also be placed underground, making it difficult, if not impossible, to detect by satellite images and accordingly difficult to target.

Another advantage is the design of the weapon. HEU can be used in the gun-type device, the least complex of the nuclear weapons. Because of this, HEU is considered attractive material for terrorist groups interested in building nuclear weapons. For this reason, it can be argued that the development of this program raises the risk of proliferation by North Korea.

The plutonium program, however, still has benefits for North Korea, particularly as it has carried out two nuclear tests—in October 2006 and May 2009—presumably based on a plutonium device.

“Weaponized” Plutonium

Of all the aspects of North Korea’s nuclear program, the most difficult to address in any denuclearization talks is likely to be the plutonium North Korea has converted into weapons.

No outsiders have ever been known to have had access to what North Korea calls its “weaponized” plutonium, which is widely believed to mean plutonium metal. U.S. experts who have visited the country say they have been left with the impression that once the material is weaponized, North Korea’s General Department of Atomic Energy, which is in charge of the Yongbyon nuclear plant, is no longer responsible. They believe the responsibility shifts to another authority, most probably the country’s military.

No specific arrangements were ever made for the weaponized plutonium in any of the Six-Party denuclearization efforts so far. It is a part of the nuclear program that North Korea had never granted other countries access to.

No official figure is available on how much North Korea possesses of what it calls weaponized plutonium. After his visit to North Korea in January 2009, however, Selig Harrison quoted North Korean officials as saying that they had 30.8 kilograms of weaponized plutonium. This figure translates roughly into four or five nuclear weapons. North Korea may be in possession of additional weaponized plutonium, as it may have already made nuclear warheads out of recently extracted plutonium.

Delivery Systems

North Korea's nuclear threat is combined with its ballistic missile program, and that is another issue that must be addressed in the future.

North Korea has developed three types of missiles. One is the short-range Scud missile, which can reach up to 500 kilometers, or all of South Korea. Another type of missile is the medium-range, which have a range of about 1,500 kilometers, covering U.S. bases in Japan and major Japanese cities. Finally, there are the longer-range intercontinental ballistic missiles, including the Taepodong-2, which is estimated to have a range of up to 6,700 kilometers. The April 5 test was believed to have been a test of the Taepodong-2 technology.

North Korea's successful development of missiles, however, does not automatically mean that North Korea's nuclear weapons can be delivered. North Korea is not thought to possess the technology to develop warheads small and reliable enough to be carried on long-range intercontinental ballistic missiles. Experts say Pyongyang has some way to go in order to overcome problems related to vibrations associated with second-stage separation.

Nuclear Collaboration with Other Countries

Any future denuclearization talks will also have to deal with North Korea's nuclear cooperation with other countries. While the denuclearization efforts stalled, the possibility of North Korea proliferating nuclear material and technology continued to be in the headlines. North Korea's possible cooperation with Burma/Myanmar, another isolated state, came under scrutiny after several developments linking the two countries took place in early 2009.

Concerns increased when a North Korean cargo ship, the *Kang Nam I*, sailed for Burma/Myanmar in July. The 2,000-ton *Kang Nam I* departed North Korea's Nampo port only a few days following the adoption of a UN Security Council resolution calling for a worldwide embargo on the country's weapons trade. While the nature of the cargo has never been made clear, the vessel was suspected of carrying military equipment and was closely shadowed by the U.S. Navy destroyer *John McCain* before it returned to North Korea.

Also in July, a set of photographs and a 37-page report regarding a secret visit to North Korea in November 2008 by a Burmese delegation led by General Thura Shwe Mann, joint chief of staff of the Armed Forces, were obtained

by Burmese opposition groups and published. In the pictures, the Burmese delegation is shown to be in meetings with North Korean officials, signing a document with them and visiting landmarks in and around Pyongyang as well as military facilities. Also apparently during the visit, the two sides agreed on closer military cooperation, including efforts directed at modernizing military equipment

In addition, U.S. Secretary of State Clinton told reporters at the summit of the Association of Southeast Asian Nations on July 22, 2009, in Thailand that the United States had “growing concerns about military cooperation between North Korea and Myanmar, which we take very seriously.” Clinton said that the concerns included “the transfer of nuclear technology and other dangerous weapons.”

Finally, in August, two Australian investigators, Desmond Ball and Philip Thornton, offered that their interviews with two Burmese defectors show Burma/Myanmar’s pursuit of the acquisition of a nuclear capability to be a genuine threat. The two wrote that if the testimonies of the defectors are correct, “the alleged ‘secret’ reactor could be capable of being operational and producing a bomb a year, every year, after 2014.”

While the developments have generated much concern, whether Burma/Myanmar was receiving nuclear assistance from North Korea remains an open question. The cargo on *Kang Nam I* was never verified. U.S. government officials have admitted several times following Secretary Clinton’s remarks that they remain unclear about the exact nature of cooperation between Burma/Myanmar and North Korea. In addition, defectors are not always the most reliable of sources.

Suspicious of illicit military cooperation, including nuclear cooperation, however, remain, particularly in the United States. It appears to be a logical choice—arms exports and other military cooperation are considered by North Korea to be a method for earning badly needed foreign exchange, and Burma/Myanmar is one of the logical choices for such a market, as North Korea continues to be subject to economic sanctions and has only a limited number of markets for its military equipment.

The suspicions of North Korea’s nuclear links with Burma/Myanmar followed its widely reported cooperation with Syria. That connection was highlighted in April 2008, when the United States disclosed that a facility in northeast Syria,

which was bombed by Israel on September 6, 2007, was a plutonium nuclear reactor under construction. This facility at Al Kibar could have produced nuclear fuel rods from which weapons-grade plutonium could have been extracted, according to U.S. officials. In this context U.S. officials released to the media several items of evidence of North Korean involvement, including a photograph of a man who is believed to be a North Korean nuclear official visiting the facility.

Nuclear cooperation with Iran has also been long suspected. Press reports quoting U.S. and European intelligence officials have pointed to collaboration between the two countries in the development of both plutonium and weapons. In this case, the suspicions continue because one has what the other lacks. North Korea, for example, has nuclear test data from its two detonations, which Tehran does not. Tehran has mastered uranium centrifuge technology and already runs uranium enrichment plants, while North Korea is not known to have acquired them yet. By cooperating, they could both further their nuclear ambitions.

VII. CONCLUSION

Efforts to denuclearize North Korea have often been characterized by difficulties and an increase in tensions triggered by mistrust among the involved parties, particularly between main players the United States and North Korea.

North Korea's rocket launch on April 5, 2009, and the U.S. reaction to it in particular underscored failure by both sides to understand the other's point of view. The United States saw the launch only as a provocation that violated UN Security Council Resolution 1718, rather than considering the possible domestic role of the act, and responded by garnering international support for the condemnation of the launch. North Korea, meanwhile, viewed U.S. behavior as yet another act of hostility by the United States. Ultimately, the rocket launch marked the point that determined the direction North Korea was to head with the new U.S. administration: confrontation.

Bosworth's trip in December served the important purpose of conveying a message from Obama directly to Kim Jong-il through a key figure in the North Korean regime, Kang Sok-ju, so that messages would not be misinterpreted or misrepresented in any way. While positive, this is likely to be only a first step towards putting the Six-Party Talks back on track. In addition, the danger of mutual mistrust triggering yet another vicious cycle will continue to exist.

Should the talks resume in the near future, they will be held against a strong sense, particularly in Washington, that the United States should not be made to “buy the same horse twice”—an expression used to describe its rejection of a cycle of a freeze of the Yongbyon nuclear complex and its reversal. This is reflected in the language used by the U.S. administration. It has resurrected the term “irreversible” when referring to denuclearization, which had been dropped in the last years of the Bush administration, following strong opposition from North Korea.

Given the continued lack of trust between the United States and North Korea—the two key players of the denuclearization talks—it is unrealistic to assume major leaps in a short period of time. A reasonable diplomatic settlement may involve a midway point, where North Korea gives up certain parts of its nuclear program—its recently extracted plutonium, for example—in exchange for security assurances and economic benefits.



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