

October | 2018



Necessary Conditions For Achieving FFVD Without Militarized Conflict

**A Korea Strategic Outcomes
Virtual Think Tank (ViTTa®)
Report**

Produced in support of the
Strategic Multilayer Assessment (SMA) Office
(Joint Staff, J39)

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What is ViTTa®?

NSI's **Virtual Think Tank (ViTTa)** provides rapid response to critical information needs by pulsing a global network of subject matter experts (SMEs) to generate a wide range of expert insight. For this Strategic Multilayer Assessment (SMA) Strategic Outcomes on the Korean Peninsula project, ViTTa was used to address eight key questions provided by the Joint Staff project sponsors. The ViTTa team received written response submissions from 50 subject matter experts from academia, government, military, and industry. Each Korea Strategic Outcomes ViTTa report presents 1) a summary overview of the expert contributor response to the ViTTa question of focus, and 2) the full corpus of expert contributor responses received for the ViTTa question of focus. Biographies for all expert contributors are also included in each report.

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ViTTa Question

[Q3] Under what regional and domestic political, economic, and social conditions would it be possible to achieve final, fully verified denuclearization (FFVD) of the DPRK without resorting to militarized conflict (i.e., what conditions would have had to occur to make that possible)?

Subject Matter Expert Contributors

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Summary Response

This report summarizes the input of thirty responses from the Korea Strategic Outcomes Virtual Think Tank (ViTTa) expert contributors. While this summary response presents an overview of the key expert contributor insights, the summary alone cannot fully convey the fine detail of the contributor inputs provided, each of which is worth reading in its entirety. For this report, the expert contributors consider what regional and domestic political, economic, and social conditions are necessary for achieving final, fully verified denuclearization (FFVD)¹ of the Democratic People’s Republic of Korea (DPRK) without resorting to militarized conflict. This summary details the various conditions that emerge.

The insuperable odds of achieving FFVD is a point highlighted by a majority of the contributors, with several contributors expressing significant doubt that a denuclearized DPRK is possible at all.² At best, contributors suggest, true progress towards achieving FFVD will require a long-term perspective, modified expectations, and a measured approach; however, even this does not ensure success.³ Nevertheless, the approach and order of conditions may matter more than the conditions themselves.

¹ CVID (complete, verifiable, and irreversible denuclearization) was the prevailing term used at the time of this report’s central question’s creation and during the collection of expert contributor responses; however, this summary report will use FFVD (final, fully verified denuclearization) as it reflects current terminology. The original terminology is retained in the full expert contributions provided later in the report.

² See contributions from Bennett; Gause; Mount; Panda; Petrovics; Robinson; Samore; Swaine; and Tow.

³ See contributions from Kulacki; Mehta; Mount; Platte; and Town.

Setting the Stage and Changing the Outlook

In considering necessary conditions for achieving FFVD, contributors set the stage by reviewing the DPRK's motivations for its nuclear weapons program. The prestige of being a nuclear power is certainly important to the Kim regime and the people of the DPRK,⁴ but it also helps to ensure the regime's hold on governing power and control,⁵ while also playing to its Juche ideology.⁶ Nuclear capability provides the DPRK with security and deterrent capability against potential threats to its sovereignty from outside forces, leverage over other international actors (particularly the ROK), and relevancy and legitimacy on the international stage.⁷

In reflecting on the motivations behind the DPRK's nuclear weapons program, several contributors offer necessary conditions for achieving FFVD that are more akin to perspective or ideological shifts, rather than on-the-ground requisites. These shifts, contributors stress, are compulsory conditions to having any chance of achieving FFVD.

Building Mutual Trust

Contributors who advocate for perspective shifts as being a necessary condition for achieving FFVD emphasize that, in order for any credible steps towards DPRK denuclearization to occur, the key actors involved have to work towards establishing and building mutual trust. Currently, there is a severe lack of trust among the key actors, and this lack of trust, contributors suggest, is a major impediment to the perspective shifts and on-the-ground conditions needed for true progress towards achieving FFVD. Overcoming this impediment, however, may not be easy, as there appears to be little reason (if any at all) currently for the DPRK and the US to trust each other.⁸ Thus, as the situation stands currently, the US would have to take substantial risk in trusting any DPRK commitment to FFVD and, at the same time, would have to offer serious reassurances and/or binding agreements to appease the DPRK's distrust of the US and its true intentions relating to FFVD.⁹ Even such reassurances, however, may not be enough given recent US precedent. Dr. Todd Robinson of the Air Command and Staff College, for example, argues that "the US' withdrawal from the JCPOA was a colossal strategic mistake that might ultimately make an agreement with the DPRK impossible, as it suggests that a state might do exactly what it is required to do under the terms of whatever agreement is made and the US might simply renege on its end of the bargain because it feels like it."

New Perspectives

In addition to the need to overcome an absence of mutual trust, the key actors involved in the DPRK denuclearization process may also have to adjust their existing perspectives and ideologies. Achieving FFVD without resorting to militarized conflict, contributors suggest, will require a shift in the way in which the DPRK thinks about nuclear weapons. More specifically, the Kim regime will have to accept that the security of the regime, sovereignty and territorial integrity of the country, and international prestige of Kim Jong-un and the DPRK would not be harmed—and may actually be increased—without nuclear weapons.¹⁰ Essentially, contributors explain, the DPRK would have to be convinced that there is no threat

⁴ See contributions from Fuhrmann; Town; and Wadsworth.

⁵ See contributions from Gause and Mehta.

⁶ See contribution from Denmark.

⁷ See contributions from Denmark; Delury; Mehta; Platte; Town; and Wadsworth.

⁸ See contributions from Fuhrmann; Platte; and Town.

⁹ See contributions from Delury; Fuhrmann; and O'Neil.

¹⁰ See contributions from Fuhrmann; Hastings; O'Neil; Rinna; and Town.

against the state and, therefore, there is no need for nuclear weapons.¹¹ If such a shift in the DPRK perspective were to occur, it would likely increase the possibility of FFVD being achieved. This appears to be particularly true, contributors suggest, if the DPRK perspective were to start shifting towards perceiving economic power as being more important than nuclear power, as a more economically-focused mindset may drive the regime towards exchanging nuclear capability for economic opportunity and normalized relations with the international community.¹² Ultimately, however, this type of shift in perspective would require the DPRK to fundamentally change its worldview and *raison d'être*.¹³

The US may also have to shift the way in which it thinks about the DPRK and denuclearization, including potentially making exceptions to previously held expectations and redlines, in order to achieve FFVD.¹⁴ Achieving FFVD without resorting to militarized conflict, contributors contend, may require the US to take a new approach to the DPRK, specifically one in which the US starts to accept and recognize the DPRK and the Kim regime on the international stage.¹⁵ Such a shift in the US perspective may be a particularly impactful move toward achieving FFVD, Dr. Justin Hastings of the University of Sydney suggests, especially if this US acceptance of the DPRK includes a loosening of restrictions on DPRK economic activity and if the US itself commits to economic investment with the DPRK.

Economic, Political, and Social Conditions Conducive to Achieving FFVD Without Militarized Conflict

Beyond the need for mutual trust and new perspectives discussed above, contributors also highlight several more on-the-ground conditions that may be conducive to achieving FFVD in the DPRK without resorting to militarized conflict. The lists below summarize the political, economic, and social conditions most commonly cited by contributors. With thirty contributors offering conditions, however, the list of ideas is extensive, with some conditions directly contradicting others.

Inside the DPRK

Reassure Kim Jong-un's safety and US credibility:

- Significant reassurances are provided to Kim Jong-un that FFVD will not threaten the security of his regime.¹⁶
- Credible assurance is provided that the US will not renege on its agreements.¹⁷
- The DPRK is acknowledged as a member of the international community.¹⁸
- The US commits to not implementing any new sanctions during FFVD negotiations.¹⁹

Support economic growth:

- Opportunities are created for the DPRK to access international markets and foreign economic aid.²⁰

¹¹ See contributions from Kulaki and Wadsworth.

¹² See contributions from Knopf; Kulacki; and Platte.

¹³ See contributions from Lyon and Platte.

¹⁴ See contribution from Delury.

¹⁵ See contributions from Cimbala; Hoare; and Knopf.

¹⁶ See contributions from Cimbala; Delury; Denmark; Fuhrmann; Hastings; Mehta; Mount; and Wadsworth.

¹⁷ See contribution from Gause.

¹⁸ See contributions from Hoare; Denmark; Knopf; Mehta; and Town.

¹⁹ See contribution from Town.

²⁰ See contributions from Cimbala and Town.

- Economic development is promoted in the DPRK beyond Pyongyang and the Kim regime.²¹

Improve social conditions:

- Social exchanges are facilitated between the DPRK and other countries (e.g., cultural, educational, and scientific exchanges are initiated in the region, particularly with the ROK; DPRK officials are allowed to travel and study abroad; Americans are allowed to live and work in the DPRK).²²

Regime change:

- Regime change occurs in the DPRK (e.g., peaceful coup occurs within the DPRK; Kim Jong-un suddenly dies and there is an ascension of figures dependent on China or the ROK; isolation from the outside world becomes so profound that the DPRK collapses, leaving its people and territory to fall under ROK or foreign tutelage).²³

US-China

The US and China cooperate on the DPRK:

- The US and China fully commit to and cooperate on offering the DPRK economic, political, and security assistance and guarantees.²⁴
- The US and China exert costly economic pressure on the DPRK to force it into initial FFVD negotiations and keep it on track towards FFVD.²⁵

The US and China do not cooperate on the DPRK:

- The US applies maximum economic pressure against both the DPRK and China (e.g., the US strengthens export/import embargoes against the DPRK and China and toughens sanctions against Chinese financial institutions doing business with the DPRK) to isolate the DPRK from China and force the DPRK to comply with US FFVD demands.²⁶

Multilateralism

- The US commits to a multilateral approach that incorporates key regional actors (i.e., DPRK, US, ROK, China, Japan, and Russia) to work towards a broader Asian Pacific regional security architecture.²⁷

Reduced Tension on the Korean Peninsula

- US-ROK military exercises are reduced or terminated.²⁸
- DPRK-ROK talks on the reunification or demilitarization of the peninsula are established.²⁹

²¹ See contributions from Hastings; Mount; and Rinna.

²² See contribution from Cimbala; Hoare; Mount; and Town.

²³ See contributions from Sun; Pollack; and Robinson.

²⁴ See contributions from Hastings; O'Neil; Rinna; Sankaran; Spalding; and Swaine. Notably, O'Neil posits that, without improved US-China relations and cooperation, the DPRK may be able to leverage its relations and negotiations with each country against the other (i.e., the DPRK may leverage its relations with China against the US, and vice versa).

²⁵ See contributions from Hastings and Knopf.

²⁶ See contributions from Swaine and Yu.

²⁷ See contributions from Cimbala; Gause; Kulacki; Lyon; Mehta; and Sankaran.

²⁸ See contributions from Cimbala; Fuhrmann; and Platte.

²⁹ See contributions from Cimbala and Platte.

- The Korean War is formally ended and a peace treaty is signed.³⁰
- Missile and weapon verification and limitation agreements are negotiated with the DPRK.³¹
- DPRK-ROK joint military professional exchanges are established.³²
- DPRK and ROK observers are increasingly invited to regional military exercises.³³

What is the Best Approach to Achieving FFVD?

The insuperable odds of achieving FFVD without resorting to militarized conflict is a point that is echoed in nearly every contributor response. Not surprisingly, therefore, contributors emphasize the importance of carefully considering the *approach* that is taken towards achieving FFVD on the Korean Peninsula. In fact, the approach and order of conditions may matter more than the conditions themselves. Contributors are generally definitive, however, in the view that FFVD should be viewed as a long-term objective that requires a measured approach. Such an approach, contributors explain, must allow the key actors involved ample time to build and establish mutual trust—a fundamental element of any approach to peaceful denuclearization. To help build this trust among key actors, contributors suggest, the US and its regional allies must implement a clearly devised and projected set of executable policies.³⁴

As such, contributors reflect on what they envision to be the best approach to achieving FFVD without resorting to militarized conflict, presenting several options for consideration. Dr. Stephen Cimbala of Penn State Brandywine and Dr. Matthew Fuhrmann of Texas A&M favor a phased approach in which parties work together to implement a defined set of conditions over time (i.e., limits on testing and missile production, increases in DPRK-ROK joint military exchanges, progression towards regional agreements on cooperative threat reduction measures) rather than immediately pushing for denuclearization. Dr. Andrew O’Neil of Griffith University offers a “strategic trust” approach, pointing to US-Soviet arms control process as a potential model. Jenny Town of the Stimson Center advances an approach in which the US extends political concessions and commitments early on to consider what the DPRK is willing to do and how far it is willing to progress towards FFVD. Offering these kinds of commitments up front, she believes, could fuel more advanced negotiations later in the process.³⁵ Finally Dr. Jeffrey Knopf of the Middlebury Institute of International Studies highlights the importance of sequencing in any approach to achieving FFVD, arguing that granting the DPRK its “ultimate carrot” (i.e., diplomatic recognition) should be the final step in the process, given only once there is confidence that FFVD has indeed been achieved.

Other contributors advocate for an approach that incorporate elements of both punishment and reward. Dr. Rupal Mehta of the University of Nebraska, Lincoln offers an “ad-hoc carrots and sticks” approach that combines a punishments pathway (e.g., targeted sanctions—particularly against the DPRK military—and cyber intervention) with a parallel rewards pathway (e.g., regional economic incentives and financial assistance, particularly from China). Hastings considers a three-phased approach that combines Chinese pressure, US guarantees, and DPRK compensation (i.e., China exerts economic pressure on the DPRK to begin denuclearization efforts and stay on a pathway toward denuclearization, the US provides security

³⁰ See contribution from Cimbala.

³¹ See contributions from Cimbala and Decker.

³² See contributions from Cimbala and Mount.

³³ See contributions from Cimbala and Mount.

³⁴ See contributions from Mount and Town.

³⁵ Town notes that, “while front-loading a process is not ideal, backloading reciprocal actions will also fail, as the DPRK will only move forward at pace with its counterparts.”

and economic guarantees to the DPRK, and the DPRK denuclearizes and shares the economic benefits it receives for doing so with its military and entrepreneurial elite).³⁶

Finally, some contributors advocate for an approach that is more focused on internal, domestic DPRK dynamics. For example, Town posits that the best approach may be one that allows Kim Jong-un to present himself as a hero to his people, which, she suggests, may embolden him to choose a new, non-nuclear path. Dr. James Platte of the United States Air Force Center for Strategic Deterrence Studies suggests that an approach focused on reunifying the peninsula under Seoul's leadership is likely the approach that is most certain to achieve FFVD. He reminds us, however, that there can be no guarantees that such an approach would not resort to militarized conflict. Therefore, he advocates for an approach that combines implementing robust economic sanctions and launching an information campaign to erode the regime's domestic governing power and support. A prolonged erosion of the regime's power and support, he believes, could eventually compel change.

Ultimately, it is unclear that any approach could truly achieve FFVD on the Korean Peninsula. The best outcome for the US, therefore, may include living with a de facto nuclear DPRK, an improved relationship with the hostile state, and acceptance of the DPRK into the international community. What does seem clear, however, is that in order for progress to be made toward achieving FFVD in the DPRK, major shifts in perspectives and expectations are needed on all sides.

³⁶ Hastings notes that such an approach could emerge as a result of a coordinated strategic decision to denuclearize being made by both the DPRK and China.

Subject Matter Expert Response Submissions

Dr. Bruce Bennett

Senior International/Defense Researcher (RAND)

18 October 2018

It may not ever be possible to get North Korea to fully dismantle its nuclear weapons program—we do not know. North Korea has said repeatedly over the years that it will not do this—that Libya's Gaddafi was a fool to trust a US security guarantee which the US then broke. The North Korean Vice Minister of Foreign Affairs has suggested that the North is unwilling to consider unilateral nuclear disarmament, but that is exactly what the North committed to do in both the April 27 Panmunjeom Declaration and the June 12 Singapore Agreement, and what the United States wants it to do.

All of the regional actors (except North Korea) will be better off if the North dismantles its nuclear weapons program. But only South Korea and Japan fully support FFVD. China and Russia probably want North Korean FFVD, but they prefer to make the US take the lead on this issue and have the US suffer any embarrassment from failing to succeed. They know that President Trump is adamant about FFVD, and thus they don't have to press the North; indeed, they tend to view relations in the region as a zero-sum game and thus would be happy to see a US failure.

At this point, the key question is: When (if ever) will North Korea stop building more nuclear weapons and begin to meet its commitments to go to zero nuclear weapons and zero nuclear weapon production capability? At least in the spirit of China's concept of "freeze-for-freeze," the North needs to identify its key nuclear weapon production facilities (nuclear reactors, uranium enrichment, plutonium reprocessing, and nuclear weapon assembly) and allow one or more nuclear powers (for example, China?) and the IAEA to establish monitoring in those facilities to verify no further nuclear weapon production. The North has apparently been unwilling to identify the location of its covert facilities, not wanting to give the United States targets. But the North could keep some of the locations secret from the US by working with China to establish production monitoring procedures in them.

In his Pyongyang summit meeting with ROK President Moon Jae-in, Kim Jong-un reportedly said that he wants to complete the dismantlement of his nuclear program by the end of President Trump's first term in office. If this is true, why is he still spending hundreds of millions of dollars building nuclear weapons that he plans to surrender in the next two years? If he has shifted to emphasizing development of his economy, why isn't he spending this money on his economy? If he is serious about dismantling his nuclear weapon program, when will Kim's actions start matching his words, as opposed to being exactly the opposite?

Dr. Stephen Cimbala

Distinguished Professor of Political Science (Penn State Brandywine)

16 May 2018

U.S. objectives include the denuclearization of North Korea, the deterrence of armed attack on South Korea or Japan, and the construction of a durable, deterrence-stable and crisis shock resistant security architecture for the Asia-Pacific region. This implies a regional security architecture in which the control of nuclear weapons spread is important, as is the diplomatic management of relations among the existing nuclear weapons states in Asia to ensure against deliberate or accidental-inadvertent nuclear first use.

The denuclearization of North Korea cannot be accomplished in a single bilateral negotiation, nor as a fait accompli growing out of a militarily imposed solution. The negotiations that may result in the denuclearization of North Korea will, of necessity, involve other regional U.S. partners and allies: including South Korea, Japan, China and Russia. This format will require consultation and collaboration among the five parties negotiating with Pyongyang as to their immediate, intermediate and longer-range objectives.

Denuclearization of North Korea will require the five negotiating partners to agree measures for continuing reassurance and stable deterrence. Reassurance starts with what North Korea wants most: a permanent end to the Korean war in the form of a peace treaty signed by the relevant powers (North and South Korea, the United States and China) and supported by the other negotiating partners (Russia and Japan) as well as the UN Security Council. The treaty should provide explicit acknowledgment of North Korea as a state member of the international community and renounce efforts at imposed regime change by outside powers. Absent such an agreement, North Korea has little or no incentive to provide concessions on military or other matters as a result of diplomatic negotiations.

Denuclearization may be defined differently by North Korea compared to its five interlocutors in the six-party framework (as above). For the United States, officials have stated the venerable formula of CVID (comprehensive, verifiable, irreversible dismantlement) of North Korea's nuclear weapons and supporting infrastructure. It must be realized how ambitious this aim is. Without nuclear weapons or at least the capacity to promptly manufacture and deploy nuclear weapons, North Korea is a much less important international actor. Its leader Kim Jong-un vaulted himself into global prominence in 2017 precisely by a staccato of nuclear and missile tests and by explicit threats of nuclear attack against the United States and its regional allies. In addition, it is thought by military experts that, although the North Korean conventional military forces are large in size, they are inferior to those of South Korea in technology and in other ways. In any war between the two Koreas without the use of nuclear weapons, South Korea (presumably supported by the U.S.) would prevail.

Therefore, the first step in any multilateral negotiation with North Korea is to agree the five partners on a gradualist strategy for DPRK denuclearization. The increments of a gradualist strategy might be as follows: (1), North Korea agrees to a moratorium on all nuclear and missile testing; (2), North Korea agrees to a road map for its future production of fissile materials, with limitations on the amounts of enriched uranium and weapons grade plutonium, as verified by international inspectors; (3) North Korea agrees to limitations on the numbers and ranges of its ballistic missiles; (4), North and South Korea agree to ongoing bilateral military to military professional exchanges, including shared observers at military exercises; (5), North Korea, South Korea, Japan, China, Russia and the United States agree on cooperative threat reduction measures in the Asia-Pacific theater to reduce the likelihood of any outbreak of conventional war or resort to nuclear coercion. These measures could include steps to avoid accidental or inadvertent naval engagements, air collisions, provocative military exercises, and-or declarations of hubristic no fly zones or expanded air identification zones.

In addition to the conclusion of a peace treaty ending the Korean war (as above), parallel or reciprocal moves by the Five could be as follows: (1), reduction in the frequency and intensity of U.S. – South Korean military exercises (but not their elimination); (2), economic assistance to North Korea for food aid and infrastructure, including schools, hospitals, transportation, electrification, and environmental needs; for example, in the case of transportation, China and Russia agree to finance a “Silk Road –Korean extension” high speed rail and superhighway to carry Russian and Chinese exports through North Korea to South Korea (and Korean exports in reverse); (3), an aggressive program of cultural exchanges between the two Koreas and between North Korea and free market countries, including performances by theater groups and other artists as well as lecture series, student exchanges, research collaboration between academics, and an open door for investment partnerships; (4), admission of North Korea to the international banking system without restriction along with eligibility for development loans from IMF or other international financiers; along with this, encourage U.S. and other free market economy states to establish business schools in North Korea (Wharton Pyongyang); (5), South and North Korea agree to talks on the possibility of reunification or, failing that, demilitarization of the Korean peninsula (to the extent of large scale reductions in the capabilities of their offensive conventional military forces, including long range air, artillery and missiles), supported by agreed transparency measures, possibly including regional or UN observers.

Regardless the particular schedule for implementation of these or other measures, it will also be necessary to address specifically the wider problem of nuclear weapons spread in Asia. An Asian Nonproliferation and Nuclear Threat Reduction Council (ANNTRC) should be established among states in the region, supported by the UN and including NWS and NNWS that are shareholders or stakeholders in Asian-Pacific regional stability (shareholders live in the neighborhood or deploy significant military forces there – stakeholders are others whose economies or security are directly affected by Asian-Pacific stability or lack thereof). The Asian Nonproliferation and Nuclear Threat Reduction Council would be a forum for the discussion of issues and concerns about nuclear weapons spread and, as well, a possible template for constructive conflict avoidance, resolution or containment (in the case of dangerous incidents or outbreaks of regional war with the potential for nuclear escalation). Ultimately this council might be broadened in its mandate to include non-nuclear related security and stability issues: an Organization for Security and Cooperation in Asia (OSCA) modeled along the lines of the present OSCE (Organization for Security and Cooperation in Europe).

Debra Decker

Senior Advisor (Stimson Center)

21 May 2018

Verification discussions could take place, including within the studies of denuclearization verification that have been prompted by the Treaty on the Prohibition of Nuclear Weapons. The current administration is positioned to take a novel approach to engagement both with North Korea and internationally by exploring ways to fulfill its commitment to Article VI of the Nuclear Non-Proliferation Treaty. This relatively hardline administration has the credentials to explore potential options like these that others have not had.

Dr. John Delury

Associate Professor of Chinese Studies (Yonsei University)

5 June 2018

For the DPRK, and Kim Jong Un in particular, nuclear weapons are not an end-in-themselves. They are means to things that all states/ rulers seek: 1) security—of the regime and the sovereign nation; 2) prosperity – of the elite and general populace; 3) prestige – of the ruler and people.

It is self-evident that the DPRK's nuclear capability provides deterrence value vis-à-vis hostile powers, namely the ROK and United States and its allies. The homemade security guarantee provided by a nuclear capability takes priority and precedence over goals 2) and 3). Over the past 5 years, Kim Jong Un has accepted limits to his ability to achieve 2) in order to maximize 1). At the same time, his *byungjin* policy ensured a continuing focus on economic improvement and laid foundations for the new strategic line, announced in April just before the Panmunjom Summit, of placing 'all efforts' [100%] on economic development. This was, literally, a 'strategic decision', at the highest level. KJU is now building/ maintaining a domestic coalition to support his decision, and rearranging foreign relations in alignment with it.

The key condition that has to be met in the near term to get KJU on a denuclearization path is real actions by the US and ROK to alleviate DPRK security concerns. These steps would be both real/ substantive, in a military sense, as well as symbolically significant, in a political sense, in helping KJU keep his coalition together. That is a high bar. It requires delivering on 'peace' just as we expect KJU to deliver 'denuclearization.' Peace cannot come as the reward for denuclearization; it is a simultaneously unfolding condition of denuclearization [and vice versa]. This was the meaning of KJU's reported comment while in China on the need for 'phased and synchronous' steps. Cynics view this as the old 'playbook' of salami tactics, stalling for time. I view it as a realistic framework for a real process of peace, denuclearization, and normalization that works for both sides.

There is extensive discussion among US experts and in the media about the specifics of our denuclearization expectations—what we expect KJU to give up [warheads, materials, facilities, missiles, know how], on what timeline [usually argued as fast as possible], and with what transparency [a verification regime as invasive as possible]. Comparatively little attention is paid to defining peace:

- what can we offer KJU in terms of security guarantees [bilateral non-aggression pact; peace declaration confirmed at UNGA level; peace treaty]
- what threat reduction & confidence building measures can we take [mil-mil dialogue mechanism; joint observations; joint patrols; non-proliferation commitments & cooperation]
- what security posture adjustments are we prepared to undergo [troop drawdown; thinning out of forward-deployed forces & fortifications; 'nuclear free zone' commitments, including no introduction of strategic assets, no first strike commitment]

A combination of steps—big and small, fast and gradual, symbolic and substantive—will be required to transform the relationship from hostile/ threatening to neutral/cooperative. The process is reciprocal and the essence is relational. Denuclearization in terms of capabilities is a function of transforming the relationship.

The first phase [year 1] of transformation should be primarily focused on the political-military dimension ['peace and denuclearization'], with reciprocal steps on an agreed timeline and roadmap to move from hostile to neutral. But as soon as initial period [3-6 months] of commitments completed successfully, both sides should begin to increase their focus on socio-economic dimension ['reconciliation and joint prosperity']. Enabling KJU to achieve his strategic goal of leading his country to 'catch up' with its neighbors [this phrase, 'catching up with South Korea, China and others', was used by a DPRK participant in a track 1.5 conference I attended in Scandinavia in spring, 2018].

Can we be 100% sure DPRK gets to 'complete' denuclearization? Probably not. But if KJU moves DPRK along an asymptotic line toward zero, we should be able to verify the trajectory, and whether we can know beyond a doubt that the curve gets to zero at a certain point becomes academic.

Can we ever achieve the goal of 100% irreversible, permanent denuclearization? Probably not. They've built the bomb already, against the odds. They can presumably do it again in the future. So, the goal is a latent nuclear DPRK—like ROK, Japan, Taiwan. And, a DPRK that is no longer in a hostile/threatening relationship with the US or ROK.

American thinking about North Korea has fallen into a rut of thinking only in terms of threat, and a deep fatalism about the possibilities of progress. KJU represents a major opportunity at ending the hostile relationship. Are we ready for it?

Abraham Denmark

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6 June 2018

For North Korea to peacefully, completely, and verifiably denuclearize, Pyongyang will need to radically change its multi-generational approach to foreign affairs and national security. For decades, North Korea's leaders have seen nuclear weapons as the ultimate guarantor against invasion from a hostile world, and potentially as a useful tool to enable the forceful reunification of the Korean peninsula. While North Korea's leaders may decide that, like the vast majority of other nations in the world, it does not require nuclear weapons to guarantee its security. Yet that is unlikely, as Pyongyang seeks a guarantee of its security and the security of the Kim family regime that no external power can reliably provide.

Some have suggested that Pyongyang may be willing to denuclearize if provided sufficient security assurances from the United States, and also potentially from Washington. While this may be an option worth testing, it is highly unlikely that Pyongyang will ever accept such assurances as reliable enough to replace the guarantee of nuclear weapons. This is due to latent distrust North Korean leaders retain toward the United States and China, but is more fundamentally rooted in the nature of the Kim family regime itself.

Juche, the state ideology of North Korea, emphasizes political independence, economic self-sustenance, and self-reliance in defense. It is the product of the intense nationalism of North Korea's founder Kim Il Sung, who saw Korea as having repeatedly been the victim of hostile, rapacious foreign forces. Of course, North Korea depended on China to stave off defeat during the Korean War, and the North Korean economy was largely dependent on Soviet assistance throughout the Cold War. Nevertheless, geopolitical realities as well as ideological constraints both make it difficult to envision Pyongyang entrusting its security to any foreign power, especially when it has the ability to guarantee its own security through the development and retention of a credible nuclear deterrent.

That said, it is certainly possible that North Korea would be willing to discuss arms control arrangements that shape and limit its nuclear capabilities. This could include assentation into the Comprehensive Test Ban Treaty, the Nuclear Non-Proliferation Treaty, and other bilateral and multilateral agreements. Indeed, Pyongyang would likely trumpet such agreements as recognition of North Korea as a legitimate nuclear power.

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6 June 2018

There are major – perhaps insurmountable – barriers to complete and verifiable denuclearization of North Korea in the short term. Pyongyang sees its nuclear arsenal as a vital guarantee of regime survival. To have any hope of disarming North Korea diplomatically, the United States must reassure Kim Jong Un that his regime will remain secure in the future if it eliminates its nuclear weapons. This is a tall order for at least three reasons.

First, history shows that countries sometimes pay a price for giving up nuclear weapons programs. Ukraine agreed to return nuclear missiles that it inherited from the Soviet Union in exchange for security assurances. Per the 1994 Budapest Memorandum, Russia promised to respect Ukraine's territorial integrity. However, twenty years later, Russian leader Vladimir Putin annexed Crimea, which had been part of Ukrainian territory. Along similar lines, Libyan dictator Muammar Qaddafi reached a deal with the United States in 2003 to abandon his longtime pursuit of nuclear weapons. This represented a key diplomatic victory for the United States, but things did not work out so well for Qaddafi: the United States intervened militarily in Libya's civil war in 2011 and the Libyan leader was ultimately killed by rebels. By contrast, countries that have nuclear weapons tend not to suffer major military attacks or attempts at regime change. This might make a country such as North Korea think twice before eliminating its nuclear capabilities.

Second, there is very little trust between the United States and North Korea. Deals have been made in the past only to fall apart later. The 1994 Agreed Framework, in which Pyongyang agreed to rollback its nuclear program in exchange for economic aid and assistance in building nuclear power plants from the United States and its partners, provides one such example. North Korea is at least partially to blame for the failure of prior deals, but this history has helped breed an environment of mistrust that makes cooperation more difficult in the present.

Third, and relatedly, even if North Korea believed U.S. assurances in the present, circumstances can change in the future. The United States faces what political scientists call a "credible commitment problem." Right now, North Korea is negotiating from a

position of relative strength. Yet its position would be much weaker in the future if it did not possess nuclear weapons. Officials in Pyongyang might therefore ask: what would stop the United States from renegotiating the terms of the deal later, once the balance of power has changed dramatically in its favor? President Trump's withdrawal from the Joint Comprehensive Plan of Action (JCPOA), a nonproliferation deal concluded with Iran in 2015, probably exacerbates this concern.

There are things the United States could do to address these problems, thereby increasing North Korea's confidence in a disarmament deal. However, the policies that would be most effective in this regard are very likely to be politically unacceptable.

One option, for instance, would be for Washington to pull its military forces out of South Korea and eliminate its alliance with Seoul. This would probably make North Korea worry less about a future U.S. attack or regime change attempt, and it would be a huge concession to Pyongyang. Indeed, part of North Korea's strategy is seemingly to drive a wedge between Washington and Seoul. However, the consequences of this policy would be large for the United States – so large that the option is essentially a nonstarter, in my view. Weakening the relationship with South Korea would increase the risk that Seoul develops nuclear weapons, harm the U.S. geopolitical position in East Asia, and undermine America's reputation regionally and internationally. In any case, it would be hard for the United States to convince North Korea that Washington would not reintroduce forces in South Korea at some point in the future.

North Korea would probably be more likely to agree to a nonproliferation deal – despite the issues outlined above – if it believes that a U.S. attack will occur in the absence of an agreement. The problem for the United States is that it is difficult to make threats to attack North Korea credible. Pyongyang has a nuclear arsenal that could hit regional allies, U.S. military bases in Asia, and probably the American mainland (though the latter is still debated among experts). Attacking North Korea therefore exposes the United States to nuclear retaliation. Pyongyang's nuclear arsenal is relatively underdeveloped, making it potentially vulnerable to a disarming first strike. Yet the mobility, dispersion, and hardening of North Korea's nuclear assets complicate efforts to destroy the capabilities before Pyongyang has an opportunity to fire at least one missile. Launching a preventive strike aimed at eliminating North Korea's nuclear arsenal would be enormously risky and could result in incalculable consequences. Pyongyang presumably understands this, and therefore might question whether the United States would carry out such an operation. This weakens the leverage that the United States might have at the negotiating table as a result of the military threat.

Washington could attempt to make a seemingly non-credible threat believable by taking risky actions that raise the possibility of inadvertent escalation. The Nobel Prize-winning economist Thomas Schelling called this "brinkmanship." The United States could, for instance, send American bombers over North Korean territory to signal its resolve. The problem with these kinds of actions is that they are exceedingly dangerous. Pyongyang might mistake a military signal for an impending attack, causing it to launch a preemptive nuclear strike against the United States or its allies. (See the tweet from the political scientist Vipin Narang on September 25, 2017: "DPRK really hates the B-1B flights--they're clearly making the regime nervous [about] surprise attack. This is how war by miscalculation starts.") As Todd Sechser and I argued in our 2017 book *Nuclear Weapons and Coercive Diplomacy*, the very thing that makes brinkmanship potentially effective – namely, that it can be very dangerous – should also give leaders pause before utilizing this tactic.

Prestige is an oft-cited motive for building nuclear weapons in scholarship and popular commentary. World leaders from Charles de Gaulle in France to the Shah of Iran have viewed nuclear technology as a means to increase their standing in international politics. Kim Jong Un likely views North Korea's arsenal along these lines as well, though prestige considerations seem to be secondary to security-related factors. Nevertheless, the prospects for a deal that puts North Korea on a path towards denuclearization would probably increase if Pyongyang believed that its social status would be enhanced internationally without nuclear weapons.

The best chance to achieve complete and verifiable denuclearization, in my opinion, is through a phased approach. The Trump administration seems to favor immediate denuclearization. This is probably unrealistic because of the reassurance-related challenges described above, as well as the challenge the United States faces in making military threats credible. Taking an incremental approach to disarmament might address the trust-related barriers to cooperation. If both sides are able to achieve small victories at the outset, they may worry a little less about paying a price for their cooperation. Convincing North Korea to put a cap on its ICBM capabilities might be a good place to start. From there, assuming that North Korea's interests are not severely threatened as a result of this concession, Washington might have better luck achieving more ambitious aims.

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4 June 2018

Kim Jong-un's fundamental goals are regime survival and perpetuation of Kim family rule. He will do whatever it takes to ensure these two objectives. Whether to retain or dump the nuclear program depends on how it supports (or not) Kim's objectives. Unlike his father, KJU thinks strategically and over the horizon. For this reason, he may be willing at some point in time agree to a grand bargain. This would include significant security and economic guarantees. China and Russia will probably have to be part of the equation to ensure that the US does not go back on its word about no regime change. The ROK will have to come through with something along the lines of a Marshall Plan that is calibrated to NK's tolerance level. Even after all of this complete denuclearization may not be possible, or at least verified. At what point does the international community settle for the good enough vice the perfect?

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28 May 2018

The most relevant actors in a denuclearization scenario—China, the US, and North Korea—all must have changed political, social, and economic conditions for complete and verifiable denuclearization of the DPRK to be achieved without military force being used. One can see a denuclearization scenario coming about as a result of strategic decisions to denuclearize being made in both Pyongyang and China, with the following conditions in place: (1) China exerts costly economic pressure on North Korea to begin and keep at denuclearization; (2) the United States moves to become a security guarantor and economic developer of North Korea; (3) North Korea compensates the military for denuclearization, and shares in the economic benefits of denuclearization with entrepreneurial elites.

How North Korea needs to change

In terms of complete denuclearization, North Korea needs to make a strategic decision that its security and prestige are better guaranteed without nuclear weapons than with nuclear weapons. Though unlikely, this realistically means that North Korea would have to appraise its security situation as one in which it no longer needed nuclear weapons to guarantee its security. Without a strategic decision, no amount of verification will be satisfactory for determining that denuclearization is complete.

In terms of verifiable denuclearization, North Korea would need a fundamental change in how it thinks about information and transparency, given that control of information and general opacity has been a key method for North Korea to bolster its defenses, in addition to maintaining domestic control.

The US also needs to temper its expectations about transparency, and what that means in a North Korean context. A stove-piped internal working culture in North Korea, with extensive secrecy and ambiguity even for otherwise mundane activities, let alone something as sensitive as the nuclear weapons program, means that it is possible that North Korea itself cannot account for all aspects of its nuclear program in a denuclearization scenario.

North Korea needs an iron-clad security guarantee – specifically of the survival of the Kim Jong-un-led regime – from the US and China. United Nations and other sanctions have put North Korea in the position of relying more on China economically than it would like, and North Korea has traditionally attempted to maintain its freedom of action by moving between and manipulating larger countries. Moving toward the US as security guarantor would help mitigate one of North Korea's main long-term concerns, the dominance of China. In part this security guarantee would consist of various US military moves, but it could also include economic development plans.

Given that denuclearizing would entail relegating the DPRK military to a lower status, North Korea would need some way to compensate the military. In this situation, North Korea needs to be able to allow the military and associated companies to profit from exporting (conventional) weapons and technology. There is a market for very cheap if unreliable weapons, as suggested by other countries' attempts to circumvent DPRK sanctions over the past ten years.

The leakage to the outside world in terms of nuclear expertise and dual-use technology (and perhaps nuclear material) may also continue despite North Korean assurances (and even despite the good faith of the central regime), inasmuch as the scientists and companies involved in nuclear weapons research and production would presumably still exist but would now need to find other

means of support. The US would need to be careful in interpreting any leakage as evidence of North Korean perfidy, and conditions would ideally be such that North Korea could make money through using some of these scientists and companies.

Economically, the regime is already changing, for reasons that have very little to do with the US. The North Korean regime has become dependent on the money brought in by entrepreneurs (and entrepreneurial activities by companies with varying levels of affiliation with the state). The regime has long been ambivalent about market activities, but despite repeated crackdowns, and attempts to rein in entrepreneurs, it is clear that private and hybrid market actors are in the driver's seat of North Korea's actual economy (separate from its state-owned economy), and the ingenuity of many of the state-owned companies in particular is why the DPRK was relatively unaffected by sanctions until 2017. Many elites have benefited (both legally and illegally) from this marketized economy, and their support for Kim Jong-un is to a certain extent predicated on continued access to moneymaking opportunities. While these elites are not in a position to overthrow Kim Jong-un, he still has to keep them relatively happy, as evidenced indirectly by his emphasis on the *byungjin* line. Allowing in investment and trade from non-Chinese partners, and giving those deals to entrepreneurial elites would help Kim Jong-un to cement support for the proposition that not being a nuclear power and developing economically is preferable to being a nuclear power but minimizing the ability of the DPRK to develop.

How China needs to change

China needs to decide that it is more strategically valuable to China for North Korea to denuclearize than for North Korea to have nuclear weapons. Given the centralization of Chinese foreign policymaking since the rise of Xi Jinping, this would have to be a decision by Xi Jinping himself. One potential factor that could feed into this decision for China is if, rather than distracting the US from China, China becomes convinced that North Korea's nuclear weapons actually encourage the US to focus on China and its problematic role in the region.

China would also have to be willing to accept economic pain, or conditions would have to be such that there is no longer much economic cost to pressuring North Korea. There are costs to China to pressuring North Korea economically, not only in terms of the costs of enforcement of sanctions (including border security) but also in terms of the foregone opportunities to businesses in the northeastern Chinese provinces (particularly Liaoning and Jilin) that are not allowed to trade with North Korea (or are forced to resort to smuggling) during sanctions enforcement episodes. To pressure North Korea to the point where it is willing to give up its nuclear program to make the economic pain stop, China has to take on significant costs. Businesses in northeastern China would have to be compensated, and/or China would have to re-orient the development of the region away from North Korea.

How the US needs to change

The US needs to decouple resolution of the North Korean nuclear weapons question from other North Korea issues, including human rights and North Korea's various illicit money-making enterprises, some of which are likely out of the hands of the North Korean central state (such as drug trafficking). Domestically, in the US, this would require a change in how some interest groups, Congress, and the Administration approach North Korea. The US would also need to create an agreement with North Korea that would not be easy for future administrations and Congresses to do away with, as North Korea would likely demand some measure of credibility of US commitments.

The US would need to be in a position, along with South Korea, to move investment into North Korea, and to engage in trade with North Korea very quickly. The legal restrictions in place on US and South Korean companies doing business with North Korea would need to be scrapped. The US would also need to accept that the North Korean central state would derive financial benefit from any business ventures (legal or illegal). At the same time, the presence of US investment in and trade with North Korea would not only help North Korea to develop economically (thus providing a carrot for denuclearization), it would also lock the US into making a commitment to North Korea.

The US needs to drop any mention of Libya, or comparisons to Libya as an exemplar for denuclearization. I was in the room in 2005 during a discussion when US representatives mentioned Libya to North Korean representatives as an example for North Korea to follow, and the North Koreans hated it even then. The US participation in the 2011 NATO campaign to bomb Libya, and Gaddafi's subsequent death, was counter-productive for any future denuclearization efforts.

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Acceptance that the DPRK is here to stay for the foreseeable future would be a beginning. This would involve the US and Japan establishing normal diplomatic relations, on the basis that this does no more than accept that the normal means of contact between states would apply. It should not be seen as a sign of approval or disapproval, merely the acknowledgement of the

existence of a particular state. US diplomatic presence in Pyongyang would be a powerful force. Concentrated efforts to get more DPRK officials to travel and study abroad – opening eyes to the outside world is a very powerful tool in encouraging understanding and broadening knowledge. Give the DPRK elite something more than the intellectual stodge that they are currently fed. Begin to think in terms of what is possible rather than the complete solution. Solutions that do not threaten take time and patience. A part deal on which one can build is a better aim than an apparent complete solution that fails to work. Patience is important. Easing of international sanctions apart from weapons' related ones would be a positive gesture.

Which regional actors have interests consistent with a complete and verifiable denuclearization of the DPRK? Which actors have interests that are at odds with that outcome? Which are indifferent?

The US, China and Russia all have nuclear weapons, presumably they want to keep them. This rather limits completeness of their commitment to regional denuclearization, which seems to be the only grounds on which the DPRK might be willing to allow the sort of intrusive checks that are envisaged. Past actions such as the acceptance of India and Pakistan nuclearization indicate that apparent strong opposition to the possession of a nuclear weapons' capability can be overcome. Conflict is presumably anathema to all. Leaving aside the huge potential loss of life and specific devastation that would arise in any major conflict, East Asia-Pacific is vital for world economic links and development. It is hard to see any regional power that would feel this would not matter to them.

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13 June 2018

The single biggest factor is internal decision making in the DPRK. The Kim regime would have to decide it wants economic growth and a more normal relationship with the outside world. Absent a fundamental decision inside the North to reorient the government's basic approach along these lines, CVID is very unlikely to be achievable.

It may be possible to help motivate a decision along these lines by maintaining very severe economic sanctions on the North. This requires China to go along.

The Trump-Kim summit may also help here. It showed the United States is willing to depart from its past approach. It granted Kim a degree of recognition and status, and could create hope in his mind that fruitful negotiations with the US are possible. Kim would have to expect economic benefits, security guarantees, and diplomatic recognition for this path to be potentially attractive to him.

A Republican president like Trump has more room to negotiate than would a Democrat. Senate Republicans will probably feel obligated to support a deal reached by a president of their party, but would mostly vote against any deal reached by a Democratic president. Senate Democrats will likely support a deal either way. This creates the possibility of negotiating a deal that can take the form of a treaty and be ratified by the Senate. This more binding arrangement will make a deal more attractive to the DPRK.

The details of a negotiated deal will also matter. In particular, the US Senate will care very much what kind of verification measures are included. Weak verification could prevent ratification. Also, some elements of sequencing will be important. The ultimate carrot of diplomatic recognition for the North should come last. If the Senate thinks recognition will be granted before the world can be confident that denuclearization has been achieved, this could also lead it to reject a deal.

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22 May 2018

All regional actors are interested in a complete and verifiable denuclearization of the entire region. Denuclearization cannot be conceived as a unilateral process or it is doomed to fail. It is not fair or conducive to stability for some nations to declare they have an exclusive right to keep nuclear weapons in the region. This basic requirement for equity creates obvious problems for the United States and China, but it is possible to develop a long-term commitment to denuclearization that all parties embrace. The DPRK can only be persuaded to denuclearize with a convincing demonstration that the threat they are meant to counter no longer exists. This will take a long time, perhaps several decades of steady improvement in regional relationships to achieve. The key is regular communication and reaffirmation of the mutual intent to eventually denuclearize, and the normalization of political, economic and cultural relations. Importantly, the DPRK seems content with freezing its current capabilities in exchange for a

commitment to this type of normalization, which can begin with modest relief of purely economic sanctions that would allow the ROK and China to aid in the development of the DPRK economy. Locking down that freeze in exchange for this modest relaxation of sanctions should be the top priority of US negotiators in any future summit meeting.

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28 May 2018

- Verifying complete denuclearization is always going to be a challenge
 - We don't know how many warheads they have now
 - Nor do we know how much fissile material they have
 - It's not only possible but likely that the North Koreans had a second uranium enrichment plant somewhere before they showed the first to Siegfried Hecker in 2010.
- In terms of actual nuclear weapons, denuclearization requires getting to zero, staying at zero during future crises, and managing strategic challenges at the conventional level
 - But it also requires reducing the opportunities for sudden breakout, which means any agreement has to prohibit more than just weapons
 - The world would not be much more stable if North Korean scientists stood poised over either dismantled weapons or warm production lines, where the rates of reconstruction were unacceptably brief.
- So, what domestic conditions in North Korea would be necessary for denuclearization?
 - We'd need a regime in Pyongyang committed to its own denuclearization (thereby easing the verification challenge)
 - We'd need a regime considerably more transparent than the one we now confront
 - We might even need a North Korean population better able to voice its concerns about 'what's happening down the road?', without fear of regime reprisals
- Regionally?
 - We'd need a security environment in Northeast Asia that Pyongyang did not see as threatening
 - Which would probably also require a North Korea that was less provocative and destabilizing in its regional behavior
 - But, at the same time, we'd need a security environment that Pyongyang was convinced would react strongly to any return by the DPRK to its nuclear program
 - North Korea must not be allowed to imagine that, *down the track*, it can have its nuclear program back without incurring the costs it now faces.

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29 May 2018

North Korea's nuclear program remains the most significant challenge to the nonproliferation regime and arguably one of the greatest threats to international security that we face today. Pyongyang's tradition of antagonistic behavior on the Korean peninsula and the recent rise in belligerence towards United States are increasingly troubling, especially in light of continued nuclear and missile testing, including that of an ICBM believed capable of reaching the United States. Despite continued efforts by the US and other key members of the international community to negotiate with Pyongyang, North Korea remains committed to its nuclear program.

Unlike many other proliferators, North Korea's commitment to nuclear weapons is abundantly clear. As recently as 2013 and reiterated since then, a top North Korean decision-making body issued a statement, calling its nuclear weapons "the nation's life" and stated they will not be traded even for "billions of dollars."³⁷ North Korea's persistence in the development of nuclear weapons as a deterrent against foreign aggressors and as a means of attempting to revise the status quo in their favor has become increasingly clear over the past two decades and has significantly shaped the interactions between the North Koreans and the

³⁷ <http://www.cbc.ca/news/world/north-korea-calls-nuclear-weapons-nation-s-life-1.1303455>.

international community. Further, North Korea has taken clear steps to demonstrate its continued advancement in nuclear capability: the past two years has seen a significant increase in the number of tests of new missile technology, including the recent test of the ICBM.

Yet, despite the growing tensions in the region, ramped-up nuclear development under Kim Jong-Un, and aggressive rhetoric aimed at the United States, there is little to suggest that the U.S. would seriously consider the use of military force against the North Koreans. Doing so may prompt a retaliatory military response against U.S. interests, its allies, and other states in the region – all of which would be a prohibitively high a cost to pay. Discussions of a preventive military strike against North Korea would thus be non-credible.

Under these conditions, where the United States maintains a low resolve to use force against an adversary, we face a significant challenge in inducing denuclearization for such a proliferator. A revisionist, pariah state with markedly divergent preferences from that of the U.S., and for whom the possibility of a military attack is close to zero – the options are exceedingly limited. Indeed, the past half century has revealed exactly this difficulty: the DPRK has hardly moved from its nuclear intentions despite myriad exogenous incentives.

North Korea's relationship with the international community is more perilous than ever. What began with an emphasis on policy that was "the best option" has now turned into a sanguine, resigned assessment that "there are no options – good or otherwise." That may indeed reflect the current state of affairs between Pyongyang and Washington but there is no more important time to consider short-term stopgap and de-escalatory tactics as well as long-term strategies aimed at security and stability on the Korean peninsula. This is even more salient in the current political climate (at the time of writing on May 24, 2018) where the White House has just canceled a planned summit with North Korea after recognizing and praising the Kim regime. I present three recommendations for policy-makers seeking to manage the North Korean problem, while at least for the time being, successful (and peaceful) nuclear reversal seems unlikely.

First, the option to use military force must remain 'on the table.' While a preventive attack on North Korea is unlikely, it is must be made clear that the United States will not hesitate to respond to either conventional or nuclear aggression against the homeland or our allies and interests abroad. This is, to some degree, the status quo. According to North Korean (or is it North Korea?) expert, Dae-Sook Suh, "the reason for the North Korean nuclear weapons program is based on its need to survive. It is not to improve its power position vis-a-vis South Korea or to use nuclear blackmail in its international relations. It is not the purpose of the North Korean nuclear weapons program to engage in nuclear arms trade.... North Korea thinks it needs such weapons for its survival."³⁸ Analysis of the North Korean case provides additional evidence to suggest that Pyongyang deeply fears a military strike by the Americans and is primarily focused on existential deterrence to ensure the survival of the regime. North Korea scholar, Bruce Cummings, states, regarding President Reagan's decision to sell F-16s to South Korea which was seen as a direct threat to DPRK in the 1980s, "this scenario truly horrified the North Koreans, and during the remaining Reagan years they shouted themselves hoarse in opposition to U.S. policy."³⁹

While the U.S. must work to assure the North Koreans, the South Koreans and the Chinese that it will not initiate a conflict with the DPRK and endanger its allies in East Asia, it must also demonstrate its resolve to respond in such a way that would end Kim Jong-Un's regime if they were to strike first – a strategy that emphasizes deterrence by punishment. As stated by a former American diplomat, "This means that even if we can't prevent North Korea from gaining the ability to hit us or our allies, we can deter it from actually doing so, and thus have time to pursue, by means more effective than sanctions and less dangerous than war, our ultimate goal of a reunified Korea that threatens no one."⁴⁰

Second, a future policy approach toward North Korea must include both sanctions (and other punishments) and rewards. Targeted economic sanctions, especially if channeled through Chinese companies that work with the North Korean military, and cyber intervention that impact 'left of launch' are useful in causing pauses and disruptions, which may now be the outcome of interest.⁴¹ However, evidence from the historical record, and the North Korean case in particular, demonstrates the necessity for a parallel path of rewards, such as economic trade with or financial assistance from the Chinese and other partners. If the acceptance of a nuclear North Korea and the paring down of the U.S. presence in the region are prerequisites for any formal agreement, an agreement may be impossible. However, negotiating an ad-hoc 'carrots and sticks' approach that does not demand these as non-starters in exchange for shorter-term suspensions or inspections may be more credible and durable.

Further, this combinative approach may alleviate concerns that the United States is focused solely on regime change. By de-emphasizing isolation and encouraging economic opportunities for North Korea, it may be possible to garner more support from the Chinese who remain primarily concerned about a North Korean state collapse on their border. As stated by retired U.S. Admiral Mike Mullen in 2016, "The stakes are huge... Instability generated on the peninsula could cascade into China, making

³⁸ Cha, 2002.

³⁹ Cha, 2002.

⁴⁰ Malinowski, 2017.

⁴¹ Malinowski, 2017; Panda and Narang, 2017.

China's challenge of providing for its own people that much more difficult."⁴²

This strategy of positive and negative policy levers may help elicit more partners to help manage the North Korean threat, especially if the United States maintains its desire to retire from its role as a global leader in counterproliferation. For the Chinese, South Koreans, and the Japanese, a strategy that seeks to influence nuclear decision-making and a slowing down in nuclear development may be preferable than a return to policies that exacerbated instability.

Finally, this strategy entails identifying acceptable stop-gap measures in search of a longer-term solution. It will require concretely engaging the Chinese more on this issue while alleviating their concerns about the externalities of the regime's collapse. It will require American restraint and de-escalatory rhetoric to ensure that Kim Jong-Un does not seek to employ short-range nuclear capabilities against a conventional invasion, and long-range ICBM capabilities to deter American nuclear retaliation by threatening the homeland. Lastly, it may entail learning to live with a nuclear North Korea, imbued with 'strategic patience,' while assuring Americans, U.S. allies, and the DPRK in the strength of our nuclear deterrent and our resolve to respond if deterrence fails.

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 13 June 2018

Complete and verifiable denuclearization of North Korea is infeasible in the near term.

Even assuming enthusiastic and organized North Korean cooperation, even a decade of concerted verification efforts will likely remain insufficient to certify denuclearization to a high degree of certainty. Uncertainties about the quantities of fissile materials produced, the disposition of declared material, and the existence of undeclared stocks would require that a political judgment be made to write off unresolved issues. In practice, North Korean cooperation is unlikely. Over the last years, Pyongyang has declared itself a capable nuclear power, resisting not only dismantlement of its arsenal, but also inspection of dismantled sites, and disclosure of information about the program. Any disarmament measures are likely to remain limited and any attempt at verification resisted.

Denuclearization should remain a guiding objective of allied policy on North Korea, but must now be a long-term objective. Though continual efforts should be made to reach negotiated limits on North Korea's nuclear and missile arsenals, verifiable denuclearization will now prove impossible prior to the transformation of the North Korean state. As a result, the United States and its allies must devise and execute a set of sustainable policies to transform North Korea over time, even as they maintain deterrence of aggression and containment of illicit activity.

It is nearly axiomatic to argue that denuclearization could occur when the regime considers it necessary to achieve regime survival. However, neither US offers of security assurances nor attempts to threaten regime stability through military or economic coercion were sufficiently credible to bring Pyongyang to that political choice. American leverage is likely to decline following the Singapore summit of June 2018.

Denuclearization as a long-term objective draws on a similar logic, but a different method. When denuclearization does occur, it will be because an evolving government in Pyongyang understands that disarmament is the best way to maintain power. Some conditions that would be enable this choice:

- North Korea's leaders understand denuclearization and integration into the global economy as a means of placating an increasingly powerful class of elites who demand new markets for economic ventures.
- At the same time, the North Korean leadership would have to be sufficiently confident that it would not face extreme retribution from the military, civilian population, or rival political factions for progressing on denuclearization.
- Economic integration, including the presence of significant numbers American citizens on North Korean soil, as a means of enhancing security guarantees.
- A sustained series of US-ROK-DPRK arms control arrangements that assuage first use incentives, expeditionary capabilities, and forces designed to carry out decapitation strikes. Inspections to verify the agreements would also provide for direct military-to-military interactions. Increased North Korean confidence that it could detect or repulse an attack with conventional or irregular forces may also contribute modestly.
- Change in Chinese and/or Russian tacit support for North Korea's nuclear status. Either a severe rupture of PRC-DPRK ties or a rise in Chinese coordination with the United States for denuclearization could assist with the effort. On the

⁴² <http://www.cnn.com/2017/07/25/asia/china-north-korea-border/index.html>.

other hand, more credible Chinese security assurances, possibly to include increased Chinese presence in North Korea could also contribute. Economic coercion will likely decline in effectiveness as a method to seek denuclearization.

If denuclearization is a long-term objective, the United States and its allies will require a sustainable effort to bring about these antecedent conditions (as well as to maintain deterrence and promote human rights). Ideally, economic, diplomatic, and arms control efforts would be integrated with allied efforts to promote the transformation of the North Korean regime over time. It would require sustained attention, resources, and flexibility— as well as extreme care to avoid a backlash—in order to accomplish this transition.

Importantly, efforts to bring about immediate denuclearization do not necessarily contribute to denuclearization as a long-term objective. In fact, fixation on immediately denuclearization effectively prevents efforts to plan with allies to bring about the necessary antecedent conditions for denuclearization. Domestic political expediency and widespread unrealistic expectations will hinder the transition to a more effective policy.

Dr. Andrew O'Neil

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Professor, Political Science (Griffith University)
31 May 2018

For there to be any serious prospects of CVID on the part of North Korea, at least three pre-conditions would have to be met. The first is a decision by Pyongyang to decouple nuclear weapons – and its WMD programs more generally – from the strategic identity of the North Korean state. Put another way, the regime would need to come to the conclusion that it is possible to safeguard its control over the DPRK (with respect to domestic legitimacy and deterrence externally) without nuclear weapons. The second pre-condition is that the US and its allies would need to take some bold risks in trusting Pyongyang that it was committed to CVID. As Siegfried Hecker has recently stated, any process of CVID in North Korea's case could conceivably take up to 15 years, though more optimistic estimates put the timeframe at 2-3 years. The US-Soviet arms control process demonstrated that a degree of strategic trust was a pre-requisite for verifiable caps/reductions in nuclear weapons. The planned Trump-Kim summit seems to suggest this is possible between the US and DPRK, but there is negligible mutual trust between Washington and Pyongyang. Moreover, there is limited trust between Washington and Beijing *and* Washington and Seoul over shared interests in building trust with Pyongyang, which reinforces existing obstacles to any genuine progress towards CVID. The third pre-condition for meaningful progress on CVID is coordination and cooperation between Washington and Beijing. Despite public appearances, this is lacking in the lead-up to the US-DPRK summit, with decidedly mixed messages from the region's two great powers being conveyed to Kim Jong-un. Only in a strategic environment where North Korea appreciates it cannot play the US off against China will Pyongyang be incentivized to take arms control/disarmament seriously. And even then, it is still a long shot given North Korea's refractory attitude in dealing with major powers, including nominal ally China.

Ankit Panda

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21 May 2018

Disarming North Korea of its nuclear weapons without resorting to overwhelming military force is not possible, in my view. The security assurances that North Korea demands with the end of the U.S. "hostile policy" are impossible to credibly assure and would have seriously deleterious effects on U.S. alliances in Northeast Asia and elsewhere.

Ariel F.W. Petrovics

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22 June 2018

There are no foreseeable conditions under which the DPRK would now accept complete and verifiable reversal. North Korea's leadership recognizes that it has lost any economic or industrial competitive advantage over its South Korean and Japanese

neighbors. It faces an unfriendly regional and broader international environment, and it has no superpower benefactor to support it. The Kim regime has watched with keen interest the independence with which Israel is empowered to act in its own antagonistic neighborhood, as well as the fates of other renegade regimes like Qaddafi in Libya and Saddam in Iraq who failed to maintain a nuclear deterrent.

Beyond its outward-facing strategic defensive considerations, the Kim regime must also consider the potential domestic consequences it would face for abandoning nuclear weapons. The DPRK's operating principle is built on a story of nationalistic independence and self-reliance, capable of resisting the foreign powers aligned against it. Though it is a patriarchal authoritarian regime without the democratic concerns of electoral replacement, the stability of the Kim regime is brittle and the consequences of failure intolerable. As a result, Kim Jong Un has worked to maintain the appearance of not only resisting foreign threats, but has even used his nuclear status to marshal private meetings with the world's most powerful leaders. These achievements are demonstrable successes he can use to rally national support from both the public and political elites. Failing to maintain this rally-point would therefore not only carry clear external security consequences, but could also threaten internal regime stability.

While the DPRK is not likely to accept complete denuclearization, many regional players would prefer to see a stable and nuclear-free Korean peninsula. Clearly the US and its regional allies – including South Korea and Japan especially – would prefer a denuclearized North Korea. A nuclear-armed North Korea is more capable of using conventional and even nontraditional means to oppose American and allied interests in the region. However, other players in the region are less committed to a nuclear-free DPRK. For example, while China and Russia do not necessarily want to increase North Korea's regional independence, they also do not support a denuclearization process that brings the DPRK closer the US or ROK. They would therefore likely act to derail an agreement in which the US or its allies provide economic, political, or technical support in exchange for DPRK's nuclear compliance. In Chinese and Russian estimation, a nuclear-armed but resistant DPRK is better than a North Korea with even small ties to the US.

Dr. James Platte

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1 June 2018

If history is any guide, then nuclear-armed states give up their nuclear weapons only after undergoing a fundamental change to the nature of the regime in power. After the collapse of the Soviet Union, the newly independent states of Belarus, Kazakhstan, and Ukraine all had Soviet nuclear weapons on their territory. All three states agreed to accede to the Nuclear Non-Proliferation Treaty (NPT) and sent their inherited nuclear arsenals to Russia. South Africa dismantled its nuclear weapons and acceded to the NPT during the country's transition from the apartheid regime to majority rule.

These are the only historical examples of countries giving up nuclear weapons, and one could argue that South Africa is the only example of the same country that developed nuclear weapons subsequently denuclearizing. Russia dominated Soviet politics, and the nuclear weapons placed in Belarus, Kazakhstan, and Ukraine remained in operational control of Russia even after the dissolution of the Soviet Union. Belarus, Kazakhstan, and Ukraine did not develop those nuclear weapons, and they effectively returned Russian weapons to Russia. However, that return occurred only after the ruling regime underwent a fundamental change. South Africa developed nuclear weapons and subsequently denuclearized, but only after a fundamentally different regime came to power in the country.

These cases do not provide much data to make a robust extrapolation, but the lesson here seems to be that a regime that develops nuclear weapons will be unlikely to give them up. What does this say about the potential for North Korean denuclearization? Unfortunately, it implies that the Kim dynasty that has dynastically ruled North Korea since the country's founding in 1948 must fundamentally change in order to achieve denuclearization. As stated in the response to question 1, this at least requires Kim Jong Un to fundamentally change his regime's priorities and abandoning the nuclear weapons aspect of his *byungjin* strategy of developing nuclear weapons and the national economy (often termed a socialist economy).

North Korean history and Kim's rise to power cast doubt on whether he would be willing to make such a decision. Kim Jong Un is the third supreme leader in North Korean history, following his grandfather Kim Il Sung and father Kim Jong Il. Kim Jong Un has been in power for about six and a half years now, and much of his rule has been spent consolidating his power and weaponizing the nuclear program that his grandfather started and his father ramped up. A key part of Kim Jong Un's power base and domestic legitimacy stems from his push to develop a functional nuclear arsenal, with medium- and intercontinental-range ballistic missiles as delivery systems, and he could view denuclearization as a threat to his legitimacy and power. This is in addition to the fear of and mistrust of the US military that also drove North Korea's development of nuclear weapons.

Another aspect of Kim Jong Un's rule has been a rhetorical reemphasis on ideology, centered on the authority of the Workers' Party of Korea (WPK) and of the supreme leader system built by the Kim dynasty. Denuclearization would almost require Kim Jong Un to change the *raison d'être* of his rule and of WPK authority. He certainly could make that decision and push for domestic political reform, but he also could view such a decision as potentially too destabilizing.

In Kim Jong Un's mind, another path to denuclearization starts with the end of the US-South Korea alliance and the withdrawal of US troops from Korea (ideally from Japan, too). He could then pursue some sort of inter-Korean rapprochement, possibly including a confederation government or a path to reunification under Pyongyang. Either way, if the threat posed by South Korea and the United States is removed, then Kim Jong Un's calculus could change enough to convince himself that he can declare victory and denuclearize. Even then, he could choose to retain nuclear weapons in order to safeguard his domestic legitimacy and deter any potential threats from Japan or China. This certainly does not seem to be the preferred path to North Korean denuclearization for the United States, South Korea, or Japan, though.

Reunification under Seoul is probably the surest way to North Korean denuclearization and may be the preferred strategic outcome in the long run for South Korea, the United States, and Japan. Yet, desire for reunification is waning in South Korea, especially among younger generations, due the enormous projected costs and social challenges related to reunification. There also can be no guarantee that reunification would be a bloodless process and not require military action to be taken.

Thus, North Korean denuclearization starts with a change in Pyongyang's decision making and worldview, which may require a fundamental change to the nature of the North Korean regime. Such a change in decision making could come about either through internal or external pressures, or a combination of internal and external pressures. Externally, enforcement of robust economic sanctions could pressure the North Korean economy enough to cause Kim Jong Un to decide to prioritize economic development over nuclear weapons. The North Korean economy is not highly dependent on foreign trade, and the country has endured long periods of economic hardship in the past. But some 90 percent of North Korea's trade is with China, including some key commodities, which means that Chinese enforcement of economic sanctions would be key to attempting to coerce change.

Outside actors also could help empower North Korean people through a concerted information campaign that counters Pyongyang's propaganda and spreads cultural, economic, and political information about the world outside of North Korea. Pyongyang would not react well to this, and North Korean citizens caught with foreign media, particularly South Korean media, can receive strict punishments. But such an information campaign could be more effective, more empowering for North Korean people, and less costly than a military campaign to bring about change and denuclearization.

If Kim Jong Un does not make a decision to denuclearize on his own, both economic sanctions and an information campaign could work to erode Kim Jong Un's power base and possibly compel change, including denuclearization. Internal pressures against the Kim dynasty could increase, and it would be critical to manage the situation so that any instability or reformation within North Korea does not escalate to internal or external military conflict.

The actual on-the-ground denuclearization of North Korea likely would take several years and be a true test of Pyongyang's commitment to complete and verifiable denuclearization. North Korea's nuclear program is over 30 years old and consists of several sites producing and storing fissile materials and nuclear warheads. In addition to known nuclear sites, North Korea has underground facilities throughout the country that could be used to hide materials or facilities. Gaining access to suspect underground facilities would require a pervasive inspections regime, which Pyongyang may balk at. In addition, North Korean nuclear scientists would retain their knowledge, and it would be very difficult to verify that all vital records of North Korea's nuclear program were destroyed.

Joshua Pollack

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15 May 2018

Possibilities include Korean unification or a strong form of confederation; the sudden death of Kim Jong Un and the ascension of figures dependent on China or South Korea, if any such figures can be found; or an isolation of North Korea from the outside world so profound that the state collapses, leaving its territory and people to fall under foreign or South Korean tutelage.

Anthony Rinna

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28 May 2018

The issue of North Korea divesting itself of nuclear capabilities is a Catch-22 situation. For the US, the ideal scenario would culminate in the lifting of unilateral and multilateral sanctions while North Korea disarms and focuses on developing its economy and improving human rights. This raises the question, however, of how to go about easing sanctions while being able to trust North Korea to give up its nuclear weapons.

In the near-term, medium-term and long-term timeframes, from the vantage point of US interests, it is unreasonable to expect that the US can achieve broad sweeping goals in North Korea - disarmament, the substantive improvement of human rights and increased political liberties - simultaneously. North Korean disarmament is currently the US's top security priority with regards to North Korea, and it is in the US's best interests to do so without political instability or violence. Bearing this in mind, the key to getting North Korea to disarm is not necessarily the removal of the Kim regime or even implementing democratic reform in North Korea. Rather it is eliminating the perceived advantage for North Korea in maintaining an indigenous WMD deterrent.

One possible condition that may help induce the DPRK to denuclearize would be if China and North Korea reached a definitive agreement whereby Beijing guaranteed North Korea protection under a nuclear umbrella, albeit with specific conditions. Technically, China and the DPRK are bound by a mutual defense treaty dating back to 1961⁴³, stating that China will provide assistance to the DPRK in the event of war *if North Korea is attacked first*. The specifics of the treaty, however, do not clarify whether this would constitute technical and financial support, or if it would actually entail the People's Liberation Army (PLA) engaging in direct combat operations. Furthermore, there is uncertainty as to whether or not China presently views it as worthwhile to follow through on specific defense treaty obligations with North Korea.

For China to extend a nuclear umbrella over North Korea could potentially provide a framework for North Korea to sacrifice its own nuclear deterrent. China and the United States are both legitimate, recognized nuclear weapons states that have an established strategic relationship. Thus, the two countries' militaries can remain in contact over potential issues in Northeast Asia. As long as the US maintains its nuclear coverage over South Korea, North Korea, in the views of its ruling elite, has a reason to maintain its nuclear deterrent. Conversely, should the US withdraw its nuclear umbrella over the ROK as a *quid pro quo* for North Korean disarmament, this would leave South Korea vulnerable to a nuclear attack, with no incentive for North Korea to disarm.

Should North Korea at any point begin to make progress in its bid to disarm, the international community - and in particular regional actors - could begin the process of integrating North Korea economically into the wider Northeast Asian sub-region. To integrate North Korea into Northeast Asia in a way that is favorable to disarmament, however would require conditions that see the DPRK generate more internal wealth without funds being continually diverted for military purposes. For the past 20 years or so, the DPRK's official ideology has been based on the principle of *songun* ("military first"), whereby the military has a large hand of influence in the DPRK's economy and political system. The civilian ruling elite's power is intertwined with the military to this day - the civilian ruling class has supported the military's political power to maintain their own privilege. Thus, within North Korea, a key condition to achieving denuclearization is to take advantage of the current pain sanctions have inflicted upon the country and attempt to foster alternative centers of economic power away from the capital, Pyongyang.

Ideally, this would comprise nurturing individuals or groups who maintain nominal loyalty to the Kim regime yet manage to keep their distance from the center of North Korean power and maintain their economic independence. Promoting the establishment of independent wealth-generating nodes in North Korea could allow for economic development within the country while simultaneously creating power centers that, while not challenging the Kim regime directly, circumvent the military's vise-grip on North Korea's national economy. This could take the form of promoting the creation of semi-independent wealth in border areas of China and Russia. Eventually it would be helpful to create similar conditions on the border between North and South Korea - this, however, would be much more difficult to achieve given the fact that the DPRK-ROK border is hermetically sealed, and any sort of economic activity between North and South would require official endorsement from both Pyongyang and Seoul.

In terms of regional actors - China, Japan, Russia, South Korea and the United States - and their positions on a denuclearized North Korea, in theory every one of these states is interested in seeing North Korea disarm. Japan and South Korea - both as US allies as well as in their status as NPT signatories - share Washington's vision of a completely disarmed North Korea. China and Russia, which have supported the DPRK in various ways throughout history, would in principle like to see the DPRK disarm as well. For China and Russia, North Korea's continued progress in its ballistic missile and WMD programs represents a continued risk of

⁴³ The official name is "The Sino-North Korean Mutual Aid and Cooperation Friendship Treaty."

igniting regional conflict, which Beijing and Moscow hope to avoid at all costs. Nevertheless, China and Russia fall closer to the indifferent end of the spectrum when it comes to disarmament.

The major difference between the positions held by Japan, South Korea and the US versus China and Russia is that the latter do not consider North Korean disarmament to be as big of a priority as do the US and its allies. For China and Russia, North Korean WMD are not in and of themselves a threat. Rather it is the continuous risk of conflict with the US and its allies, as a direct result of the DPRK's continued weapons development that cause Beijing and Moscow to look unfavorably on the DPRK's maintenance of a WMD deterrent. Russia in particular, while not in favor of North Korea having a WMD deterrent *per se*, does not view North Korean disarmament as being a particularly realistic goal. Neither China nor Russia support the US's primary policy tools for realizing North Korean disarmament, namely either continued economic sanctions or military intervention.

Dr. Todd C. Robinson

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18 June 2018

Up until a few weeks ago, I would argue that the conditions that would have to be in place were effectively those that we have seen in Iran: leadership seemingly interested in reform, populace supportive of that goal, willingness to trust the US and its allies, willingness to accept the most intrusive inspection regime that we have ever seen. The US' withdrawal from the JCPOA was a colossal strategic mistake that might ultimately make an agreement with the DPRK impossible, as it suggests that a state might do exactly what it is required to do under the terms of whatever agreement is made and the US might simply renege on its end of the bargain because it feels like it. If anything, the DPRK's willingness to sign such an agreement should be viewed as highly suspect, as it doesn't appear at all rational for a state to do so in light of the US' willingness to baselessly withdraw from the JCPOA. Now I'm afraid that, short of regime change, CVID denuclearization will not be possible.

Dr. Gary Samore

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2 June 2018

None. North Korea may be willing to accept verifiable limits on its nuclear and missile programs (e.g. number of nuclear weapons, types of ballistic missiles) but it is unwilling to give them up completely. For Pyongyang to feel secure enough to accept complete and verifiable denuclearization would require a fundamental transformation in the character of the regime, which is unlikely at present.

Dr. Jaganath Sankaran

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4 June 2018

Perseverance and coordination between the various parties are needed to achieve and sustain any agreement made to "denuclearize" DPRK.

Complete and verifiable denuclearization of DPRK will take time, concerted diplomatic effort, and coordination with China, Russia, Japan, South Korea and others. A deal struck with DPRK will face unforeseen (and some anticipated) problems and disagreements. The United States, allies, and partner states will need to establish mechanisms to work through these problems and disagreements.

The recent decision by the United States to withdraw from the JCPOA places a significant burden on it to clarify what would constitute "complete and verifiable denuclearization." In the case of Iran, the Trump administration has argued that denuclearization should include ballistic missiles capable of delivering nuclear warheads. Will a similar requirement be imposed

on DPRK? It seems very sensible to require that DPRK eliminate its ICBM arsenal along with nuclear weapons complex. However, at best, one can only hope for an arrangement that eliminates ICBM (and maybe IRBMs that can reach Guam). North Korea would be unwilling to give up its short- and medium- range missiles immediately. Would Japan be convinced of the virtues of such an arrangement? Japan will be a crucial player in any agreement and would most likely bear a substantial portion of the financial burden in providing economic and material aid to DPRK. It would require measurable diplomatic engagement from the United States to convince Japan to accept an agreement that focuses exclusively on long-range missiles.

Similarly, a prominent criticism by the Trump administration against the JCPOA is its lack of means to address Iranian activities in the Middle East. Will Japan and South Korea demand restraints on North Korean regional activities in a deal primarily meant to address the nuclear issue? If they do, it might complicate reaching an agreement.

Finally, the United States will need Chinese cooperation in dealing with DPRK. However, Chinese and American interests are not aligned in many aspects. It is conceivable that DPRK may insist of reduction in the U.S. forward-deployed forces and China might support such a requirement. It will be very challenging to balance the need to maintain military capabilities in the region against the need to immediately denuclearize DPRK.

Brig Gen Robert Spalding

Special Assistant to the United States Air Force Vice Chief of Staff (United States Air Force)
15 May 2018

The Chinese Communist Party in China would have to move towards true reform and opening in order for them to play a sincere role in denuclearization. As long as the CCP holds sway they will oppose any US rapprochement with DPRK that eases the pressure in a manner which allows for reunification.

Yun Sun

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Director, China Program (Stimson Center)
29 May 2018

In my view, the key issue lies with US policy. For CVID, potentially two options.

- **Option 1:** US to accept the legality of DPRK regime; accept the de facto nuclear power status of NK in the foreseeable future; provide security assurance; lift of sanctions; provide assistance;
- **Option 2:** Peaceful coup and regime change in DPRK.

Which regional actors have interests consistent with a complete and verifiable denuclearization of the DPRK? Which actors have interests that are at odds with that outcome? Which are indifferent?

If there is no cost, everyone wants CVID except DPRK. China's interest in maintaining DPRK as policy leverage vis-à-vis the US/USROK undermines its resolute to CVID. China also argues that US does not want CVID in order to maintain the North Korean threat, hence the legality of the US-ROK alliance.

Dr. Michael Swaine

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25 May 2018

If the question assumes, as implied, the continued existence of the DPRK regime, then the only way to achieve a peaceful CVID would be through enormous pressure on Pyongyang requiring full Chinese involvement, combined with the provision of a highly credible set of security, economic, and political assurances and benefits for North Korea once it eliminates its nuclear weapons program. For this to occur, Beijing would need to be convinced that Pyongyang had become excessively provocative and intractable (thus requiring rather dangerous levels of pressure) and that Washington could be relied upon to provide credible carrots in a way that Pyongyang would accept. These two developments would only likely occur if Pyongyang had undertaken a

truly major provocation, such as a nuclear test explosion or successful firing of an ICBM over the Pacific Ocean (with the latter into the Eastern Pacific); and if the U.S.-China relationship enjoyed a sufficient level of mutual trust. The latter might also require a successful multilateral dialogue on the future of the Korean Peninsula in which China's most basic concerns were addressed. Again, we are nowhere near such developments.

Dr. William Tow

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12 June 2018

It is very difficult to see the DPRK agreeing to a complete and verifiable denuclearization, even under current circumstances which include harsh US and UN economic sanctions. Kim Jong-un has linked his own political credibility and survival to the development of DPRK nuclear strike capabilities. It is highly improbable that he would relinquish his regime's authority and its long-standing ambition to integrate the Korean peninsula on the DPRK's terms, even with a relaxation of outside sanctions. It is clear that the North Korean populace is getting more information independent from their government's line via IT than before and that this trend is becoming harder for the DPRK government to counter or modify. It is improbable, however, that independent sources of information will lead to the capacity of various DPRK population sectors to communicate or organize independently from the regime and its supporters over the foreseeable timeframe. At present, China (and Russia) value(s) a DPRK buffer zone against American power in Northeast Asia more than DPRK nuclear disarmament process. Beijing will continue to regulate its own economic assistance to and trade with North Korea to ensure the Kim regime's survivability. Unless the United States is prepared to exceed substantial Chinese levels of economic interaction with the DPRK (still a remote prospect notwithstanding the rhetoric emanating from the Trump-Kim summit in Singapore due to independent factors limiting the US capacity to do so) there will be an insufficient incentive for Pyongyang to downgrade Beijing as its major patron for the time being.

Jenny Town

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Managing Editor and Producer (38 North)

5 June 2018

One of the core problems the US and others have had in dealing with North Korea is the tendency to view North Korea only the context of big power politics. This issue is often couched for instance, as a subset of US-China relations or China-Russia competition or even US-Japan alliance management. This type of approach, while having some merit, discounts North Korea's agency or ability to affect its future. So, unlike US efforts to study, observe, examine the strategic interests of big power adversaries like China and Russia, we spend little time trying to learn about North Korea's strategic interests and how they have evolved over time. Instead, there is a tendency to hone in on simplistic explanations of why the North has made certain strategic choices and project on it what we think they should care about, dangling in front of them incentives we feel any poor country should want.

Another tendency is to believe that North Korean strategy is static and unflinching, so what was true for Kim Il Sung was true for Kim Jong Il and now also for Kim Jong Un. For instance, one American diplomat and former negotiator believes North Korea's nuclear ambitions are solely for coercive purposes to keep the US at bay while it tries to take over South Korea by force, thus fulfilling Kim Il Sung's dream of a Korea united under Northern leadership. He discounts any self-defense rationale, especially reactions to the fates of Iraq and Libya, as being irrelevant mainly because the North started pursuing a nuclear program before these two regimes were toppled. He ignores the fact that the US threatened to use nuclear weapons against the North to end the Korean War, or install nuclear weapons in South Korea after the war, or even the fact that even South Korea had a clandestine nuclear weapons program under Park Chung-hee. These would all point to North Korea having real security concerns way before the cases of Iraq and Libya, of which, only underscored the threat the US poses to countries whose governments we do not approve of.

Essentially, in trying to convince North Korea that nuclear weapons are not his best path forward, solutions will have to address the full range of factors underlying its nuclear ambitions. However, this maximum pressure campaign instead of intimidating North Korea into changing its strategic course, amplified its sense of David vs. Goliath, causing Kim to move more quickly down the nuclear path to be able to fight back if needed against the giant. Cutting off economic and diplomatic ties with North Korea reduces points of leverage with the regime, making it harder to convey both carrots and sticks. It narrows leverage down to threats of military actions, which to the Kim regime, have limited credibility, knowing how risk adverse the US is to starting a

conflict that could potentially escalate into a regional or global war. It doesn't help that in the era of 24-hour news and social media, that Pyongyang can also follow the policy debates among Washington policymakers and policy influencers to see that military options are largely unpopular and unsupported within the policy community and even among Congressional members, minus a select few. These conditions all create greater strategic incentives for North Korea to barrel ahead to reach its goal rather than pull back.

The reality now, is that David doesn't feel so small anymore. By declaring his nuclear force complete, Kim Jong Un emerged on the world scene feeling stronger and at strategic parity with the big powers. He still sees the US as the superpower and covets that relationship most, but will naturally hedge against it by seeking to improve relations with China and Russia along the way. By stopping provocative testing and committing to diplomacy, relations with China and Russia can be relatively easy to repair and puts greater pressure on the US to play its part. This is especially effective now when Chinese and Russian relations with the US have been exacerbated by trade issues and economic sanctions. Additionally, completing the nuclear side of his byungjin policy helps Kim win over some domestic factors, especially some of the younger party members, who see him as having made North Korea strong and being a delivering on his promises. Moon has given Kim even greater influence by providing him a world stage and positive public relations, for which he did not have to work hard to achieve.

This combination of factors has put Kim in a very strong negotiating position. To which, his regime has spent years thinking through what their objectives would be, what they would be willing to do to achieve them and what they would want in return. While Kim is under some pressure to bring about some near-term economic wins, his strategic goals—the core of what would warrant exiting a nuclear program—he views as a long-term proposition, knowing full well the likelihood of drastic policy shifts from administration to administration when dealing with democratic states. Neither the US nor South Korea have good track records of new presidents upholding past president's policies and initiatives. Consequently, while there are certainly steps that North Korea is ready to take now to change the nature of its political relations with the international community, the time horizon for finishing a process would likely have to span at least two administrations in the US and South Korea to gain any credibility that a nonconfrontational relationship can be sustained.

The regional conditions right now are actually ripe for this process to begin but still fraught with challenges.

For China, relations with the DPRK were at an all-time low last year, caused in part by US pressure on China and threats of trade wars and secondary sanctions, but also a frustration with how much North Korea was agitating the security situation. There was also a sense that Xi Jinping still harbored feelings of resentment over a perceived lack of deference shown by Kim since he came to power. While there had been previous invitations issued for the two to meet, there is a real sense that the first Xi-Kim summit would not have happened if Kim hadn't secured a meeting with Trump in advance. While the Chinese want diplomacy to take place to maintain regional stability, they want to ensure their interests are protected even if they're not part of the dialogue.

Moon's attempts to sequence a diplomatic process that started with inter-Korean talks, then move to US-DPRK talks before bringing in China was viewed negatively in Beijing. Rebuilding ties with North Korea was in part, out of distrust for Moon, who they see as consistently trying to marginalize China's influence in the region. As long as Kim refrains from provocative behavior going forward, China-DPRK ties will keep growing stronger, dropping unilateral sanctions imposed on North Korean businesses, restoring cultural and educational exchanges and opportunities, and facilitating greater training/apprenticeship on business development, special economic zones, and likely economic management.

Russia throughout this process has been against the maximum pressure approach, recalling their own experiences with sanctions and punitive actions. While China-DPRK relations worsened, Russia-DPRK relations continued and made slight improvements. Russia still sees economic potential in North Korea in the context of infrastructure connections to South Korea and out to sea and consistently reintroduces plans for government backed economic projects such as pipelines and rail connections. They continue active educational and scientific exchanges, and some minimal level of military to military cooperation.

In South Korea, Moon is obviously eager to improve ties with North Korea and had signaled that to the North even before taking office. He has invested considerable personal capital into this rapprochement, as well as now government resources. However, while his efforts to reach out to the North have been well received by the North Koreans, the North Koreans know they have the upper hand in negotiations and are willing and able to walk away at any time, especially now since they have direct diplomatic access to the big powers. Moon's eagerness affords the North the ability to be tougher in negotiations with the South, which brings criticism from the already skeptical (and reluctant) opposition party members.

For inter-Korean talks to transform from political theater to sustainable policies, Moon will need to address the concerns of his political rivals. Partisan politics can quickly derail his efforts, as seen already in the failure of the National Assembly to ratify the Panmunjom Declaration. Winning over the conservatives will be even harder as political corruption scandals within Moon's administration continue to unfold. If there is going to be any credibility in peace agreement or denuclearization, Moon will have to 1) make the case domestically for how a peace agreement with North Korea while they still have a nuclear program improves the situation on the Korean peninsula; and 2) show tangible progress on dismantling North Korea's nuclear program and infrastructure. This second point naturally hinges on US-DPRK talks moving forward.

For the US, there first has to be some serious consideration as to what is a reasonable timeline for a denuclearization process, given the various technical and political considerations. It is not realistic to think North Korea will immediately and unilaterally disarm, no matter what incentives are offered and verification of any such process will be costly and time consuming. As their definition includes also the elimination of “US hostile policy” as a condition of disarmament, the US has to consider too what is a realistic timeframe for taking the steps that would essentially normalize relations with North Korea. This is where the human rights factor plays more prominently. Convincing Congress, which has authorized several bills denouncing North Korea’s human rights record, to move quickly toward normalization without also commitments on the human rights front will be difficult.

While skepticism of what North Korea is willing to do and how far it will really go down the disarmament road is high, there are political concessions that can be made early in process to test the proposition. Commitments, for instance, to no new sanctions measures while negotiations and diplomacy are on-going could be significant, as well as lifting the travel ban and facilitating the humanitarian, development and educational programs that have been active, and setting up direct communications channels between Pyongyang and Washington. These up front commitments can set the environment for talks to continue, with more involved measures, such as sanctions relief and discussions of a formal peace declaration to end the war could be tied to specific disarmament measures. While front-loading a process is not ideal, backloading reciprocal actions will also fail, as the North Koreans will only move forward at pace with its counterparts.

The issue of which comes first, peace or denuclearization has always been a key point of contention. The North Koreans have consistently posed this sequencing as the war must end to justify denuclearization, where are the international community has been reluctant to declare peace with a nuclear North Korea, concerned that it solidifies the North’s nuclear status. With both Koreas now asking for a peace agreement, it may be time to test the proposition. Formally ending the war may give Kim Jong Un the political cover needed to change the domestic narrative on his nuclear program. It is a clear signal of a change in the political relationship with the outside world and allows Kim to be the bringer of peace to his people, giving him the flexibility to change course without appearing to be weak or forced into a specific position.

As difficult as it may be politically to justify or sustain, a non-military path toward complete disarmament of North Korea may be to create a way for Kim Jong Un to be the hero to his people and choosing thus, a different path. Punitive measures will always solicit defensive responses and continue the cycle of provocation and reaction. David will always fight against Goliath, no matter how big Goliath may be, and the more he wins those battles, the more other “underdog” states will silently cheer him on and provide pathways to persist against the big powers. Certainly none of this will be easy or quick. The biggest challenge will be building domestic support in the US and ROK to try a nonconfrontational stance and sustain those efforts through at least one political transition of power in each country. But building a soft landing for Kim politically, could provide him the political cover to move from byungjin to an economy-first model, while bringing North Korea further into the rules and norms of the international community.

Kelly Wadsworth

PhD Student (University of Pittsburgh)
18 May 2018

Every actor in East Asia has an interest in denuclearization of the Korean peninsula. If Kim Jong Un has both verbal and physical assurance from the United States that his country will not be invaded and his regime will not be overthrown, complete denuclearization of the DPRK will be possible without resorting to militarized conflict. The most convincing physical signal the U.S. could give the DPRK as an assurance there is no threat to the regime or country would likely entail the removal of U.S. troops from the Korean peninsula. Despite recent reports the DPRK has removed this assurance from its list of denuclearization conditions,⁴⁴ North Korean leadership has, for decades, cited U.S. military presence in ROK as the biggest threat facing the regime. This is apparent by Kim’s dramatic response to the May 2018 U.S.-ROK joint military exercises.⁴⁵

The DPRK pursued nuclear weapons as a deterrence from invasion as well as a symbol of national pride. Since his “pride” has been satisfied (i.e. they have already demonstrated nuclear capability), North Korean leadership now needs to be assured there is no outstanding threat to the existence of their country or regime.

⁴⁴ McKirdy, Euan. (April 2018). *North Korea drops withdrawal of US forces as condition of denuclearization, Moon says*. CNN. <https://www.cnn.com/2018/04/19/asia/north-korea-us-forces-korean-peninsula-intl/index.html>.

⁴⁵ CBS/AP. (May 2018). *North Korea threatens to pull out of a ‘one-sided’ Donald Trump-Kim Jong Un summit*. <https://www.cbsnews.com/news/north-korea-reportedly-threatens-to-pull-out-us-summit-over-military-exercises-today-2018-05-15/>.

There are three reasons states pursue nuclear weapons: National security, bureaucratic lobbying (creating extreme perceptions of foreign threats), and norms (prestige).⁴⁶ Hymans has conducted extensive research on this, identifying leader personalities likely to “go nuclear.”⁴⁷

1. Oppositional nationalists: Seek nuclear weapons out of a combination of pride and an exaggerated fear of threats that creates a sense for urgency;
2. Sportsmanlike nationalists: Have no security reason to build nuclear weapons but are confident they could;
3. Oppositional subalterns: Want the protection of nuclear weapons but do not have the confidence that they can produce them, and;
4. Sportsmanlike subalterns: Have neither the confidence nor motivation for nuclear weapons.

Kim Jong Un is currently an “oppositional nationalist.” His “pride” has been satisfied in successful demonstration of nuclear weapons. If the U.S. removes his “security reason” to continue to build and harbor nuclear weapons, Kim will become a “sportsmanlike nationalist,” and will be amenable to complete denuclearization.

Dr. Miles Yu

Professor (United States Naval Academy)

6 June 2018

Completely isolating the DPRK from the PRC is a must-take first step as the root of this all is China, not the DPRK. The current admin is going in the right direction and needs to further strengthen export/import embargo and tough sanctions against Chinese financial institutions doing business with the DPRK. The maximum pressure approach is the only way to force Pyongyang to comply and such maximum pressure will not be maintained without China being willing or forced to go along.

⁴⁶ Sagan, Scott D. (1996). *Spread of nuclear weapons: A debate*. *Survival*. 38.1: 173-175.

⁴⁷ Hymans, Jacques EC. (2006). *The psychology of nuclear proliferation: Identity, emotions and foreign policy*. Cambridge University Press.

Subject Matter Expert Biographies

Dr. Bruce Bennett

Senior International/Defense Researcher (RAND)



Bruce W. Bennett is a senior international/defense researcher at the RAND Corporation who works primarily on research topics such as strategy, force planning, and counterproliferation within the RAND International Security and Defense Policy Center and the RAND Arroyo Strategy, Doctrine, and Resources Program. Bennett's work applies war gaming, risk management, deterrence-based strategy, competitive strategies, and military simulation and analysis. He specializes in "asymmetric threats" such as weapons of mass destruction (WMD) and how to counter those threats with new strategies, operational concepts, and technologies. He is an expert in Northeast Asian military issues, having visited the region more than 110 times and written much about Korean security issues. He has also done work on the Persian/Arab Gulf region. His Northeast Asian research has addressed issues such as future ROK military force requirements, the Korean military balance, counters to North Korean chemical and biological weapon threats in Korea and Japan, dealing with a North Korean collapse, potential Chinese intervention in Korean contingencies, changes in the Northeast Asia security environment, and deterrence of nuclear threats (including strengthening the U.S. nuclear umbrella). He has worked with the Office of the Secretary of Defense, the Defense Threat Reduction Agency, U.S. Forces Korea and Japan, the U.S. Pacific Command and Central Command, the ROK and Japanese militaries, and the ROK National Assembly. Bennett received his B.S. in economics from the California Institute of Technology and his Ph.D. in policy analysis from the Pardee RAND Graduate School.

Dr. Stephen Cimbala

Distinguished Professor of Political Science (Penn State Brandywine)



Stephen J. Cimbala is Distinguished Professor of Political Science at Penn State Brandywine. He is the author of numerous works in the field of national security studies and nuclear arms control, among other topics. Dr. Cimbala is also an award winning Penn State teacher. His most recent work is *Getting Nuclear Weapons Right* (Lynne Rienner Publishers: 2018). He is available at sjc2@psu.edu

Debra Decker

Senior Advisor (Stimson Center)



Debra Decker is a Senior Advisor at the Stimson Center. She has more than 20 years of experience developing policies and managing processes in the private and public sectors and is a subject matter expert in the field of risk management. Decker is also president of Decker Advisors, LLC, a firm she recently established to focus on framing complex national security problems in innovative ways and engaging stakeholders to develop efficient solutions. Prior to this, Decker was with Booz Allen Hamilton. She has advised the Federal Bureau of Investigation, the Department of Defense and the Department of Homeland Security on strategy and risk and has specialized in the threats stemming from weapons of mass destruction and in the vulnerabilities of critical infrastructure. As a researcher, Decker was an associate of Harvard's Belfer Center for Science and International Affairs. Her research has been featured at the World Economic Forum and to Congress. She is a member of the Society for Risk Analysis, the Institute of Nuclear Materials Management, the International Institute for Strategic Studies, and the 2013 ASIS Technical Advisory Committee for developing a national risk assessment standard. She currently serves on the boards of the Washington Foreign Law Society and of TexProtects, which works against child abuse and neglect in Texas. Decker holds an MBA from the Wharton School of the University of Pennsylvania, an MPA from the Kennedy School of Government at Harvard University, and a B.A. from American University.

Dr. John Delury

Associate Professor of Chinese Studies (Yonsei University)



Professor John Delury is a historian of modern China and expert on US-China relations and Korean Peninsula affairs. He is the author, with Orville Schell, of *Wealth and Power: China's Long March to the Twenty-first Century*, and his articles have appeared in the *Journal of Asian Studies*, *Asian Perspective* and *Late Imperial China*. He contributes regularly to *Foreign Affairs*, *Foreign Policy*, *Global Asia*, and *38 North*. He is a senior fellow of the Asia Society and Pacific Century Institute and member of the Council of Foreign Relations, National Committee on US-China Relations and National Committee on North Korea. Prior to joining the Yonsei faculty in 2010, Dr. Delury offered courses at Brown, Columbia, Yale and Peking University, and served as founding associate director of the Asia Society Center on US-China Relations in New York. He is currently writing a book about US-China relations during the Cold War, focusing on the case of imprisoned CIA officer Jack Downey. He is also working on a series of articles on China-North Korea relations and co-authored book project with Patrick McEachern on North Korean politics and history.

Abraham Denmark

Director, Asia Program (Wilson Center)



Abraham M. Denmark is Director of the Asia Program at the Woodrow Wilson International Center for Scholars, where he also holds a joint appointment as a Senior Fellow in the Kissinger Institute on China and the United States. He previously served as Deputy Assistant Secretary of Defense for East Asia.

Dr. Matthew Fuhrmann

Professor, Political Science (Texas A&M University)



Matthew Fuhrmann is Professor of Political Science at Texas A&M University. His previous positions include Visiting Associate Professor at Stanford University's Center for International Security and Cooperation (2016-17), Stanton Nuclear Security Fellow at the Council on Foreign Relations (2010-11), and Pre-Doctoral Research Fellow at Harvard University's Belfer Center for Science and International Affairs (2007-08). He was named an Andrew Carnegie Fellow in 2016 by the Carnegie Corporation of New York. His research focuses on international relations, nuclear proliferation, and armed conflict. He is the author of *Atomic Assistance: How "Atoms for Peace" Programs Cause Nuclear Insecurity* (Cornell University Press, 2012) and the coauthor of *Nuclear Weapons and Coercive Diplomacy* (Cambridge University Press, 2017). His work has been published in peer reviewed journals such as *American Journal of Political Science*, *British Journal of Political Science*, *International Organization*, *International Security*, *International Studies Quarterly*, *Journal of Conflict Resolution*, *Journal of Peace Research*, and *Journal of Politics*. He has also written opinion pieces for *The Atlantic (online)*, *The Christian Science Monitor*, *Slate*, and *USA Today*. He is a term member of the Council on Foreign Relations. You can follow him on Twitter @mcfuhrmann.

Ken Gause

Director, International Affairs Group, Center for Strategic Studies (CNA)



Ken Gause is the director of the International Affairs Group, a part of CNA's Center for Strategic Studies. He is CNA's senior foreign leadership analyst and has spent the last 20 years developing methodologies for examining leadership dynamics of hard-target, authoritarian regimes. In particular, he is an internationally respected expert on North Korea who has written three books on North Korean leadership. His latest book is "North Korean House of Cards: Leadership Dynamics Under Kim Jong-un." Leadership and opposing force (OPFOR) analysis are core areas of expertise within CNA Strategic Studies and Gause has personally directed studies on the North Korean, Iranian and Russian leadership and decision-making. His work on foreign leadership dates back to the early 1980s with his work on the Soviet Union for the U.S. government. Over the last three decades, he has devised analytical techniques used to understand adversary decision-making. These techniques span a five-tier set of methodologies that range from biographical analysis to studies on how to impact and shape an authoritarian or totalitarian regime's actions. These studies include a range of approaches from sophisticated game design to proprietary analysis based on a "virtual network" of researchers around the world dedicated to providing analysis on regimes of interest, their leadership, and how they make decisions. Gause has also published numerous articles on leadership structures for such publications as Jane's Intelligence Review, Jane's Defense Weekly, and the Korean Journal of Defense Analysis. He has a B.A. from Vanderbilt in Russian and Political Science and an M.A. from The George Washington University in Soviet and East European Affairs.

Dr. Justin Hastings

Associate Professor, International Relations and Comparative Politics (University of Sydney)
Australian Research Council Future Fellow (University of Sydney)



Dr. Justin Hastings is an Associate Professor in International Relations and Comparative Politics and Australian Research Council Future Fellow at the University of Sydney. Hastings' research is mostly focused on gray and black markets, rogue states, and the structure and behaviour of clandestine non-state actors, such as terrorists, maritime piracy, smugglers, organized criminals, insurgents, and nuclear weapons proliferators, primarily in Northeast Asia, Southeast Asia, and the Indian Ocean. Hastings was a Public Policy and Nuclear Threats Fellow at the University of California, and worked on non-proliferation issues at Lawrence Livermore National Laboratory. His projects on non-proliferation and North Korea have been funded by the MacArthur Foundation, the Australian Research Council, and the US Department of Defense, and he has taught for several years at the Non-proliferation Education and Research Center at KAIST in Daejeon, South Korea. He is the author of *No Man's Land: Globalization, Territory, and Clandestine Groups in Southeast Asia* (Cornell University Press, 2010) and *A Most Enterprising Country: North Korea in the Global Economy* (Cornell University Press, 2016). He received an AB in Public and International Affairs from Princeton University, and an MA and PhD in Political Science from the University of California, Berkeley.

Dr. James Hoare

Associate Fellow, Asia-Pacific Programme (Chatham House)



Since retiring from HM Diplomatic Service in 2003 - where his last post was establishing the British Embassy in North Korea - Dr. Hoare has pursued a second career as a broadcaster, writer and occasional teacher on East Asia. Much of his work concerns North Korea but he also has expertise on China and Japan. He has published several books, some with his wife, Susan Pares, also a former diplomat. He is a graduate of Queen Mary University of London (BA 1964) and the School of Oriental and African Studies (PhD 1971).

Dr. Jeffrey Knopf

Professor (Middlebury Institute of International Studies)



Jeffrey W. Knopf is a professor at the Middlebury Institute of International Studies (MIIS) in Monterey, California, where he serves as the chair of the M.A. program in Nonproliferation and Terrorism Studies. He is also a senior research associate with the Institute's James Martin Center for Nonproliferation Studies. Dr. Knopf received a Ph.D. in Political Science from Stanford University. Prior to joining the MIIS faculty, he taught at the University of Southern California, the University of California-Santa Cruz, and the Naval Postgraduate School. Dr. Knopf is the co-editor of a forthcoming volume on *Behavioral Economics and Nuclear Weapons*. He is also the editor of *International Cooperation on WMD Nonproliferation* (University of Georgia Press, 2016) and *Security Assurances and Nuclear Nonproliferation* (Stanford University Press, 2012) and the author of *Domestic Society and International Cooperation: The Impact of Protest on U.S. Arms Control Policy* (Cambridge University Press, 1998).

Dr. Gregory Kulacki

China Project Manager (Union of Concerned Scientists)



Gregory Kulacki is an expert on cross-cultural communication between the United States and China. Since joining UCS in 2002, he has promoted dialogue between experts from both countries on nuclear arms control and space security and has consulted with Chinese and U.S. governmental and non-governmental organizations, including the U.S. House China Working Group, the Senate Armed Services Committee, the U.S. National Academies, NASA, and the Office of Science and Technology Policy. Over the last decade, Kulacki has been cited by a number of U.S. and Chinese news organizations, including the Christian Science Monitor, Nature, New York Times, NPR, Washington Post, and Washington Times. Dr. Kulacki, who is fluent in Mandarin Chinese, has lived and worked in China for more than 20 years. Prior to joining UCS, he served as an associate professor of government at Green Mountain College, director of external studies at Pitzer College, and director of academic programs in China for the Council on International Educational Exchange. Dr. Kulacki earned a doctorate degree in political theory and a master's degree in international relations from the University of Maryland in College Park. He also completed graduate certificates in Chinese economic history and international politics at Fudan University in Shanghai.

Dr. Rod Lyon

Senior Fellow, International Strategy (Australian Strategic Policy Institute)



Dr. Rod Lyon is a Senior Fellow - International Strategy. Rod was most recently a Senior Analyst with ASPI. He has previously lectured in International Relations at the University of Queensland where he taught courses on conflict, international security, and civil-military relations. His research interests focus on a range of problems associated with global security, nuclear strategy and Australian security. He previously worked in the Strategic Analysis Branch of the Office of National Assessments between 1985 and 1996. As a Fulbright scholar in 2004, he was a visiting research fellow at Georgetown University in Washington DC, researching a project on the future of security partnerships in the post-September 11 environment. He was appointed to the National Consultative Committee on International Security Issues in April 2005.

Dr. Rupal Mehta

Assistant Professor, Political Science (University of Nebraska, Lincoln)



Professor Mehta's research interests lie in international security and conflict, with a particular interest in nuclear security, latency, extended deterrence, nonproliferation, force structure, and deterrence theory. Her dissertation book project explores the conditions under which states that have started nuclear weapons programs stop their pursuit. She is also a member of the University of Nebraska's National Strategic Research Institute where she consults for USSTRATCOM. Her co-authored work has appeared in the *Journal of Conflict Resolution* and she is a researcher with Center for Pacific Studies at the University of California San Diego where she explores the evolution of cross-domain deterrence in the 21st century. Professor Mehta received a Ph.D. and M.A. in Political Science from the University of California, San Diego, and B.A. in Political Science from the University of California, Berkeley (Go Bears). Previously, she was a researcher at the Center for International Security and Cooperation at Stanford University and the Woodrow Wilson International Center for Scholars in Washington D.C. From 2014-2015, Professor Mehta will be on leave as a Postdoctoral Fellow at the Belfer Center in the John F. Kennedy School of Government at Harvard University.

Dr. Adam Mount

Senior Fellow (Federation of American Scientists)
Director, Defense Posture Project (Federation of American Scientists)



Adam Mount, Ph.D. is a Senior Fellow and the Director of the Defense Posture Project at the Federation of American Scientists, where his work covers U.S. nuclear strategy and force structure, global nuclear politics, deterrence, and North Korea. Previously, he was a Senior Fellow at the Center for American Progress and a Stanton Nuclear Security Fellow at the Council on Foreign Relations. In 2015-16, he directed the CFR Independent Task Force on U.S. Policy Toward North Korea, a group of seventeen experts chaired by Adm. Mike Mullen and Sen. Sam Nunn. He now directs, with Andrea Berger, the FAS International Study Group on North Korea Policy, a group of twelve emerging experts from allied countries working to develop a sustainable strategy to manage a nuclear-armed North Korea. Dr. Mount's other writing has been published by *Foreign Affairs*, *The Atlantic*, *Survival*, *Democracy*, and other outlets. He is a contributor to *Axios* Expert Voices and a columnist at the *Bulletin of the Atomic Scientists*. His analysis is regularly cited by *The New York Times*, *The Washington Post*, *The Wall Street Journal*, *Politico*, *AFP*, *AP*, and *Reuters*, and he has appeared on CNN, MSNBC, BBC, NPR, and CNBC. He has testified before the House Armed Services subcommittee on strategic forces. He holds a Ph.D. and M.A. from the Department of Government at Georgetown University, and a B.A. from Reed College.

Dr. Andrew O'Neil

Dean, Research (Griffith University)
Professor, Political Science (Griffith University)



Andrew is Dean (Research) and Professor of Political Science in the Griffith Business School. Prior to being appointed Dean in April 2016, he was Head of the School of Government and International Relations (2014-2016) and Director of the Griffith Asia Institute (2010-2014). Before coming to Griffith in 2010, Andrew was Associate Head (Research) in the Faculty of Social Sciences at Flinders University, and prior to entering academia he worked as a Commonwealth public servant with Australia's Department of Defence. Andrew's research expertise focuses on the intersection of strategic, political, and economic change in the Asia-Pacific with particular emphasis on the security dimension of international relations, and he is a frequent media commentator on these topics. Working in teams, Andrew is the recipient of Australian Research Council (Discovery and Linkage Project) funding, and he has also received competitive industry funding from the Department of Foreign Affairs and Trade, the Japan Foundation, and the Department of Defence. He is a former member of the Australian Foreign Minister's National Consultative Committee on National Security Issues and former advisory board member of the Lowy Institute's G20 Studies Centre. Andrew is the former editor-in-chief of the *Australian Journal of International Affairs* and is currently an editorial board

member of the *Korean Journal of International Studies*, the *North Korean Review* the *Journal of Intelligence History*, and *Security Challenges*.

Ankit Panda

Senior Editor (The Diplomat)



Ankit Panda is an award-winning writer, analyst, and researcher focusing on international security, geopolitics, and economics. His work has appeared in a range of publications across the world, including the *Diplomat*, the *Atlantic*, the *Washington Quarterly*, *Al Jazeera*, *Politico Magazine*, and *War on the Rocks*. He is currently a senior editor at *The Diplomat*, where he writes daily on security, geopolitics, and economics in the Asia-Pacific region and hosts a popular podcast. He is also an adjunct senior fellow at the Federation of American Scientists. Panda is additionally an editor at the Council on Foreign Relations and writes a column on Asian geopolitics for the *South China Morning Post*. Panda has additionally published longer-form scholarly research in journals including the *Washington Quarterly* and *India Review*. He is additionally a contributor to the International Institute on Strategic Studies' Asia-Pacific Regional Security Assessment and *Strategic Survey*. Panda has also consulted for a range of private and public institutions. He is a frequent participant in Track-2 dialogues in Asia, Europe, and North America. Panda is a graduate of the Woodrow Wilson School of Public and International Affairs at Princeton University.

Ariel F.W. Petrovics

PhD Candidate (University of California, Davis)
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Ariel Petrovics is a PhD candidate at the University of California, Davis and a researcher at Lawrence Livermore National Laboratory's Center for Global Security Research. Her research examines the effectiveness of foreign policy strategies with specific application to national security and nuclear proliferation. Her work uses cross-national quantitative analysis, original data, and critical case studies to address current security questions, including the effectiveness of nuclear deproliferation policies, engagement with renegade regimes, and the consequences of economic sanctions. She has worked with the US Department of Energy, American Enterprise Institute's Foreign and Defense Policy Department, and the Woodrow Wilson Center's Cold War International History Project. Her work has been published in AEI's *Critical Threats Project* and UC Berkeley's *Policy Matters Journal*, and has appeared at multiple conferences including at the American Political Science Association, International Studies Association, and SAIS Johns Hopkins.

Dr. James Platte

Assistant Professor (United States Air Force Center for Strategic Deterrence Studies)



Dr. James E. Platte is an assistant professor with the USAF Center for Strategic Deterrence Studies (CSDS), and he is the course director for the Deterrence Research Task Force elective cross-listed with the Air War College and the Air Command and Staff College. Prior to joining CSDS in 2017, Dr. Platte was an intelligence research specialist with the U.S. Department of Energy, and he also has worked on nuclear counterproliferation with the Defense Intelligence Agency and the National Nuclear Security Administration. He received his PhD in international relations from the Fletcher School of Law and Diplomacy at Tufts University and has held research fellowships with the East-West Center, Pacific Forum CSIS, the Council on Foreign Relations, and the Harvard Kennedy School. Dr. Platte broadly is interested in the military and commercial applications of nuclear energy, and his research particularly focuses on nuclear issues in East Asia, including North Korea's nuclear program, U.S. extended deterrence, and the proliferation of nuclear technology across the region.

Joshua Pollack

Editor, The Nonproliferation Review (Middlebury Institute of International Studies)
Senior Research Associate (Middlebury Institute of International Studies)



Joshua H. Pollack is the Editor of the The Nonproliferation Review and a Senior Research Associate, and is recognized as a leading expert on nuclear and missile proliferation, focusing on Northeast Asia. Before joining MIIS in April 2016, Pollack served as a consultant to the US government, specializing in issues related to weapons of mass destruction, including proliferation, arms control, and deterrence. As a defense policy analyst at DFI International, Science Applications International Corporation, and Constellation West, his clients included the Defense Threat Reduction Agency, the Office of the Under Secretary of Defense for Policy, the Department of Homeland Security, the National Nuclear Security Administration, and the Plans and Policy Directorate (J5) of US Strategic Command. In 2015, he was named an Associate Fellow of the Royal United Services Institute. He also serves as a Research Scientist at CNA, a nonprofit research institution in Arlington, VA. Pollack has contributed to

ArmsControlWonk.com, 38North.org, and the Bulletin of the Atomic Scientists. His research has appeared in the The Nonproliferation Review in 2011 and 2015.

Anthony Rinna

Senior Editor (Sino-NK)



Anthony V. Rinna is a Senior Editor at Sino-NK, a research organization dedicated to the study of the Korean Peninsula and Northeast Asia. Rinna is a specialist in Russian defense and economic policy in Northeast Asia, and regularly publishes on those topics in academic journals and policy forums. He also frequently gives commentary to the media on Russia's North Korea policy. He has a working knowledge of Korean, Russian and Spanish. A US citizen, Rinna has lived in South Korea since 2014.

Dr. Todd C. Robinson

Assistant Professor, Military and Security Studies, School of Advanced Nuclear Deterrence Studies
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Dr. Todd C. Robinson is an Assistant Professor of Military and Security Studies with the School of Advanced Nuclear Deterrence Studies (SANDS), at the Air Command and Staff College, Maxwell, AFB. He is a former Stanton Nuclear Security Fellow at the RAND Corporation and previously served as the Associate Director of the University of Illinois' Program in Arms Control, Disarmament, and International Security (ACDIS). His research and commentary have appeared in the Non-Proliferation Review, the Yale Journal of International Affairs, Swords and Ploughshares, and the National Interest. He has a BA in Asian Studies from the University of Alabama, an MA in Security Policy Studies from The George Washington University's Elliott School of International Affairs, and a Ph.D. in Political Science from the University of Illinois at Urbana-Champaign.

Dr. Gary Samore

Executive Director, Research, Belfer Center for Science and International Affairs, Kennedy School of Government
(Harvard University)



Gary Samore is Executive Director for Research at the Belfer Center for Science and International Affairs at the Kennedy School of Government at Harvard University. In December 2015, Dr. Samore was appointed as a member of the Secretary of Energy Advisory Board (SEAB) under Secretary Ernest Moniz and served until January 2017. He is also a non-resident Senior Fellow at the Brookings Institution and member of the advisory board for United Against Nuclear Iran (UANI), a non-profit organization that seeks to prevent Iran from acquiring nuclear weapons. He served for four years as President Obama's White House Coordinator for Arms Control and Weapons of Mass Destruction (WMD), including as U.S. Sherpa for the 2010 Nuclear Security Summit in Washington, DC and the 2012 Nuclear Security Summit in Seoul, Korea. From 2006 to 2009, Dr. Samore was Vice President for Studies at the Council on Foreign Relations (CFR) in New York, where he held the Maurice R. Greenberg chair and directed the David Rockefeller Studies Program. Before joining CFR, Dr. Samore was vice president for global security and sustainability at the John D. and Catherine T. MacArthur Foundation in Chicago, and from 2001 to 2005, he was Director of Studies and Senior Fellow for Nonproliferation at the International Institute for Strategic Studies (IISS) in London. At IISS, he produced three "strategic dossiers" on Iran (2005), North Korea (2004), and Iraq (2002), which are considered authoritative and exemplary assessments of nuclear, biological, chemical, and missile programs in those countries. Dr. Samore was Special Assistant to the President and Senior Director for Nonproliferation and Export controls during the Clinton Administration. Before the National Security Council, Dr. Samore worked on nonproliferation issues at the State Department. In 1995, he received the Secretary of Defense Medal for Meritorious Civilian Service for his role in negotiating the 1994 North Korea nuclear agreement. Prior to the State Department, he worked at the Lawrence Livermore National Laboratory and the Rand Corporation. Dr. Samore was a National Science Foundation Fellow at Harvard University, where he received his MA and PhD in government in 1984. While at Harvard, he was a pre-doctoral fellow at what was then the Harvard Center for Science and International Affairs, later to become the Belfer Center for Science and International Affairs.

Dr. Jaganath Sankaran

Assistant Research Professor (University of Maryland)
Research Associate (Center for International and Security Studies at Maryland)



Sankaran is an Assistant Research Professor at the Maryland School of Public Policy and a Research Associate at the Center for International and Security Studies at Maryland (CISSM). He works on problems that lie at the intersection of international security and science & technology. Sankaran spent the first four years of his career as a defense scientist with the Indian Missile R & D establishment. His work in weapons design and development led to his interests in matters such as the balance of military power, strategic stability, and arms control. Sankaran received his Ph.D. (International Security Policy) in 2012, writing his dissertation on the role of deterrence, dissuasion, denial, and arms control in preserving peace and stability in outer space. He examined two inter-related issues, in detail: the deployment of U.S. missile defenses in Northeast Asia and the reaction that deployment provokes from China, including its threat to use anti-satellite missiles to destroy critical U.S. early-warning satellites. His work involved detailed calculations and technical simulations on missile defenses/anti-satellite weapons to understand various claims of capabilities and vulnerabilities, while also examining the political factors motivating Chinese and American policy choices. One focus of Sankaran's current research is U.S.-Russia strategic stability and nuclear arms control, particularly the capabilities of U.S. missile defenses and Russian claims about its destabilizing effects. Sankaran served as a technical consultant to a joint U.S.-Russian National Academies study investigating ways to foster cooperation in missile defense and to enable further nuclear arms control. The other current area focus of Sankaran's research is Asia-Pacific. Sankaran studies the growing conventional military capabilities of China and the counter military balancing undertaken by the United States, Japan, India and other states. He is working on a book project to develop metrics for measuring military power to aid strategy and policy formulation. Sankaran was awarded an Abe Fellowship to conduct field research in Japan and China support his research interests on Asia-Pacific security. He has also written on the changing nuclear postures and deployments patterns of China, India, and Pakistan and their interplay. Sankaran has held fellowships at the Los Alamos National Laboratory, the Belfer Center for Science and International Affairs, Harvard University and at RAND Corporation. Sankaran has published in *International Security*, *Contemporary Security Policy*, *Strategic Studies Quarterly*, *Arms Control Today*, *Bulletin of Atomic Scientists*, and other outlets. His research has also been published by the RAND Corporation and the Stimson Center.

Brig Gen Robert Spalding

Special Assistant to the United States Air Force Vice Chief of Staff (United States Air Force)



Brig Gen Robert S. Spalding III assumed the duties of Special Assistant to the U.S. Air Force vice chief of staff in February 2018. General Spalding received his commission through Fresno State University's Reserve Officer Training Corps program in 1991. He earned his doctorate in economics and mathematics from the University of Missouri at Kansas City in 2007. The general attended undergraduate pilot training in 1993, and was subsequently assigned as a B-52 Stratofortress co-pilot in the 5th Bomb Wing at Minot Air Force Base, North Dakota. He subsequently transitioned to the B-2 Spirit at Whiteman AFB, Missouri. In 2001, he was selected as one of three Air Force Olmsted Scholars, and was a distinguished graduate of Mandarin Chinese language training at the Defense Language Institute in Monterey, California. Afterward, the general attended Tongji University in Shanghai as a graduate research student. He then returned to Whiteman AFB as a B-2 evaluator pilot and assistant director of operations for the 393rd Bomb Squadron. The general was then assigned to the Office of the Secretary of Defense's Prisoner of War Missing Personnel Office as the military assistant for the deputy assistant secretary of defense. During the Iraq surge in 2007, General Spalding deployed to Baghdad and directed the Personal Security Coordination Center. After a stint at the Air War College at Maxwell AFB, Alabama, he was reassigned to the B-2 at Whiteman AFB. While at Whiteman AFB, he was the chief of safety, operations group commander and vice wing commander. He was then selected as a Military Fellow at the Council of Foreign Relations in New York. General Spalding then served as the chief China strategist for the chairman of the Joint Chiefs, the Joint Staff at the Pentagon, Arlington, Va. Prior to his current assignment he served at the White House as the Senior Director for Strategic Planning at the National Security Council, Washington, D.C. General Spalding speaks Chinese-Mandarin and Spanish.

Yun Sun

Co-Director, East Asia Program (Stimson Center)
Director, China Program (Stimson Center)



Yun Sun is co-Director of the East Asia Program and Director of the China Program at the Stimson Center. Her expertise is in Chinese foreign policy, U.S.-China relations and China's relations with neighboring countries and authoritarian regimes. From 2011 to early 2014, she was a Visiting Fellow at the Brookings Institution, jointly appointed by the Foreign Policy Program and the Global Development Program, where she focused on Chinese national security decision-making processes and China-Africa relations. From 2008 to 2011, Yun was the China Analyst for the International Crisis Group based in Beijing, specializing on China's foreign policy towards conflict countries and the developing world. Prior to ICG, she worked on U.S.-Asia relations in Washington, DC for five years. Yun earned her master's degree in international policy and practice from George Washington University, as well as an MA in Asia Pacific studies and a BA in international relations from Foreign Affairs College in Beijing.

Dr. Michael Swaine

Senior Fellow (Carnegie Endowment for International Peace)



Michael Swaine is a senior fellow at the Carnegie Endowment for International Peace and one of the most prominent American analysts in Chinese security studies. Formerly a senior policy analyst at the RAND Corporation, Swaine is a specialist in Chinese defense and foreign policy, U.S.-China relations, and East Asian international relations. He has authored and edited more than a dozen books and monographs and many journal articles and book chapters in these areas, directs several security-related projects with Chinese partners, and advises the U.S. government on Asian security issues. He received his doctorate in government from Harvard University.

Dr. William Tow

Professor (Australian National University)



Previously Professor of International Relations at the University of Queensland and at Griffith University, and an Assistant Professor of International Relations at the University of Southern California (USC), Professor William Tow has been a Visiting Fellow at Stanford University, and a Visiting Research Associate at the International Institute for Strategic Studies (IISS) in London. Professor Tow has been principal investigator in two major projects for the MacArthur Foundation's Asia Pacific Security Initiative. He has also been the editor of the *Australian Journal of International Affairs* and has served on the Foreign Affairs Council, Australian Department of Foreign Affairs and Trade, and the National Board of Directors, Australian Fulbright Commission. His research interests focus the United States' alliance system in the Asia-Pacific, Sino-American relations, and Australia-Japan relations. Professor Tow's research interests include alliance politics, US security policy in the Asia-Pacific, security politics in the Asia-Pacific, and Australian security policies.

Jenny Town

Research Analyst (Stimson Center)
Managing Editor and Producer (38 North)



Jenny Town is a Research Analyst at the Stimson Center and the Managing Editor and Producer of "38 North," a web journal that provides policy and technical analysis on North Korea. She is the former Assistant Director of the US-Korea Institute at Johns Hopkins School of Advanced International Studies where she focused on North Korea, US-DPRK relations, US-ROK alliance, and Northeast Asia regional security. She is an expert reviewer for Freedom House's Freedom in the World Index, where she previously worked on the Human Rights in North Korea Project. She is an Associate Fellow at the Foreign Policy Institute at SAIS, a Member of the National Committee on North Korea, and an Associate Member of the Council of Korean Americans. She also serves on the Editorial Board for Inkstick, an online foreign policy journal for emerging scholars. She holds a B.A. in East Asian Studies and International Relations from Westmar University and a Master of International Affairs from Columbia University's School of International and Public Affairs.

Kelly Wadsworth

PhD Student (University of Pittsburgh)



Kelly Wadsworth is a PhD student in International Security Studies at the University of Pittsburgh's Graduate School of Public and International Affairs. Her research focus is on nonproliferation and regional stability in East Asia, highlighting the evolving situation in North Korea. Wadsworth has held multiple fellowships from the Center for Strategic and International Studies and the Japan Institute for International Affairs to further her research in this area. Wadsworth earned her MBA and Masters in International Studies (Korea Studies) at the University of Washington.

Dr. Miles Yu

Professor (United States Naval Academy)



Miles Maochun Yu is a professor of East Asia and military and naval history at the United States Naval Academy (USNA). He is the author of numerous scholarly articles on military and intelligence history and newspaper columns; his books include *OSS in China: Prelude to Cold War*.

Author Biographies

Mariah Yager

Senior Research Scientist (NSI)
Branch Deputy (SMA)



I am a qualitative and quantitative researcher attempting to bridge the divide between empirical and interpretive methods. Since I study human communication and interaction, a truly experimental and controlled analysis is not possible. Therefore, I am interested in finding a way to bring rigor to the qualitative and interpretive context to the quantitative. Recently, I had a part in developing a scientifically valid, replicable, and operationally trainable discourse analysis methodology. This methodology has been used to examine insurgent writings, the expression of trust and worldview, and cognitive complexity, both in the vernacular and English translations. I have provided research support and analysis for various endeavors, including Strategic Multilayer Analysis (SMA) projects for the Joint Staff. I received my Masters in Professional Communication from Purdue University of Fort Wayne and have Bachelor degrees in Anthropology and Interpersonal and Group Communication.

George Popp

Senior Analyst (NSI)



George Popp is a Senior Analyst at NSI, Inc. where he conducts research and analysis on a broad range of multidisciplinary analysis projects that focus on understanding the political, economic, and social dynamics of emerging conflict situations and environments throughout the world. The bulk of George's work has been in support of NSI's government initiatives, particularly leading and contributing to human behavior analytics efforts completed for the Strategic Multilayer Assessment (SMA) program on behalf of the Joint Chiefs of Staff and in support of direct requests from US Combatant Commanders to the Department of Defense. George has also supported NSI's commercial initiatives, conducting business intelligence analyses for clients in the video game industry. George started with NSI as an Intern, and has risen through the ranks since. He was promoted to Senior Analyst in 2017. George's degree is in Economics from the University of

Massachusetts, Amherst.