Missile Defense and the Security Dilemma: THAAD, Japan’s “Proactive Peace,” and the Arms Race in Northeast Asia

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Abstract: The U.S. deployed a missile defense system, Terminal High Altitude Area Defense (THAAD) in South Korea in April 2017, citing North Korea’s nuclear and missile “threats” as justification. Its deployment, however, needs to be seen in the wider strategic context. Not only does the measure raise the arms race with North Korea, it also facilitates Japan’s “proactive contribution to peace” and exacerbates the security dilemma between the U.S. and its allies on one side and China and Russia on the other.

Key words: missile defense, security dilemma, arms race, proactive contribution to peace, North Korea, THAAD, AEGIS, EPAA

Since Seoul and Washington announced “an alliance decision” to deploy a Terminal High Altitude Area Defense (THAAD) system to South Korea in July 2016, the little-known weapon system has given rise to intense public protests throughout South Korea while triggering a series of counter-measures by the North as well as China and Russia. THAAD, a missile defense system designed to destroy an incoming enemy missile at a high altitude, has the potential not only to undermine the strategic balance between the United States and Russia as well as China but also to drive an arms race in Northeast Asia to an unprecedentedly dangerous level. Japan too is directly contributing to the global and regional strategic instability as it is engaged in operating two THAAD radar units and co-developing a more advanced missile defense system with the U.S. At the same time, Tokyo leverages its participation in the U.S.-led missile defense system to weaken or remove constitutional and legal constraints on its military. THAAD currently serves as a wedge that widens the growing strategic gulf between the continental powers and the pacific alliances led by the U.S. at a time of growing tensions in East Asia and the western Pacific.

Tracing the chain of actions and reactions involving THAAD, I develop an argument that the involved states are caught in a security dilemma. To do that, I first need to distinguish two different paths of the security dilemma. While scholars and practitioners have used the security dilemma concept since John H. Herz first suggested it in his 1950 article, few have explicitly noted two different ways in which it affects international relations. The dilemma emerges as measures taken by states to meet their security needs have the effect of increasing insecurity for others, who feel in turn compelled to take countermeasures. Barry Buzan aptly characterizes the dilemma as follows:

A structural notion in which the self-help attempts of states to look after their security needs tend, regardless of intention, to lead to rising insecurity for others as each interprets its own measures as defensive and measures of others as potentially threatening.

A careful analysis of the workings of the dilemma reveals two different ways in which it affects states’ interactions even if they stem from the same basic logic. First, two states can
be caught in an ever-intensifying arms race due to the security dilemma. A state’s defensive measure is a potentially offensive capability to an adversary, which is compelled to take its own defensive measure that will look potentially offensive to its adversary. The outcome is a vicious cycle in the form of an arms race. Second, the dilemma is not limited to two states, but affects their allies, friends, adversaries, neighbors, etc. An ever increasing number of states is caught up in the dilemma, resulting in a geographical expansion of the arms race. I call the first the intensive path of the security dilemma and the second the extensive path.

**THAAD, Two Koreas, and the United States**

Distinguishing these two paths helps us see the two different but related dangers being generated by THAAD. The U.S. and North Korea, on the one hand, are caught in an intensive security dilemma to the extent that one’s security measures intensify the other’s sense of insecurity, prompting countermeasures, which in turn intensify one’s sense of insecurity. The intensive security dilemma lies at the heart of an asymmetrical arms race between the two states. The action-reaction chain, on the other hand, is not limited to these two actors. Their security dilemma extends to other states whose security is affected by their actions and reactions. North Korea’s weapons systems targeted at the U.S. military affect Japan’s and South Korea’s security as well, leading them to take countermeasures. U.S. weapons systems directed against North Korea likewise increase Chinese and Russians’ sense of insecurity and encourage them to build up against what they worry could be used against them. The security dilemma between the United States and North Korea thus expands its geographical scope to entrap their allies and neighboring countries in a security dilemma.

North Korea has thus far conducted five nuclear weapons tests and numerous missiles tests. While it is all but impossible to tell whether its weapons systems are functional or what their real capacities are, it is certain that it has been developing the capacity to strike U.S. military facilities and personnel in the region and the U.S. continent. It may even be suggested that Pyongyang under Kim Jong Un’s leadership is engaged in a drive to acquire the capability. It is notable—and directly relevant to our discussion of the security dilemma—that it conducted its first nuclear test in 2006 when it was singled out as one of the countries in the “axis of evil” with an unveiled threat of a preemptive strike by the George W. Bush administration and that it conducted the four subsequent tests during the Obama administration that implicitly excluded North Korea from its no-first strike policy. Pyongyang indeed justifies its nuclear weapons development in terms of security threats it alleges it has received from the United States.

Whatever the merit of its justifications, its actions and capabilities concern its adversaries. To Koreans in the South, it does not give much comfort that Pyongyang presents its missiles and nuclear weapons as a deterrent, as its weapons exacerbate their sense of insecurity that these weapons may be used against them. They thus look for ways to neutralize what they perceive as a threat posed by the North. They have deployed counter-artillery systems that can destroy the North’s long-range artilleries as well as missile defense systems like PAC-3s that can—at least theoretically—knock out incoming missiles from the North mid-air. Furthermore, because they are concerned about the limited effectiveness of these defensive measures that are designed to be employed only after the North’s attack, the South’s Ministry of National Defense has adopted a preemptive strike doctrine as well as a decapacitation plan.

While THAAD is justified by Seoul as necessary to defend against the North’s missiles, it is a curious decision to deploy it in the middle of
the country, far south of Seoul, rendering it unable to protect the capital and most populous city. The decision looks more puzzling if one adds the fact that the missile defense system is designed to intercept an incoming missile at the altitude of 40km to 150km whereas North Korea's missiles would have to fly much lower to strike the South. It becomes completely confounding in light of the fact that THAAD is not only ineffective against but also vulnerable to the North's low flying short range missiles—of which it has deployed hundreds—and long-range artilleries—of which it has thousands.⁵

Only when the United States is brought into the strategic picture does the decision to position THAAD in South Korea begin to makes sense. The United States has been a direct party to the Korean War that has not ended 66 years after it began. While distance puts the U.S. continent out of reach for North Korea's weapons thus far, American policymakers are increasingly concerned about the fact that their range is growing. It has thus taken countermeasures, such as deploying PAC-3s, Aegis ships in the region and two AN/TPY-2 radars in Japan. Especially after North Koreans succeeded in placing a satellite—Kwangmyongsong-3 Unit 2—in orbit in December 2012, the U.S. military accelerated missile defense programs such as the ground-based missile defense (GMD) system in Alaska.

The THAAD system, particularly its radar AN/TPY-2, deployed in South Korea acquires significance in this strategic context. If North Korea should succeed in developing an ICBM and launch it against the U.S. continent, its trajectory would follow the great circle that goes through Alaska, making Fort Greely the ideal location for an anti-ballistic missile system. An AN/TPY-2 radar in the South can detect an ICBM launch and relay its trajectory to the GMD in Fort Greely. In addition, if the North should attempt an electromagnetic pulse (EMP) attack by flying the device southward, the radar could serve as a critical early detection system and THAAD's interceptor missiles can be employed to shoot down the EMP device during its ascent.⁶ The following maps show the two possible paths that North Korea's ICBM or satellite could take to reach the U.S. continent.
Figure 1) The red lines in the map on the left show trajectories of an ICBM from North Korea to the United States. Fort Greely in Alaska occupies a strategic location that can intercept missiles on these trajectories. The yellow lines in the center and left maps show the trajectory a satellite can take, possibly delivering an EMP attack.

Japan’s Proactive Contribution to Missile Defense

Japan is also part of the expanding security dilemma. As Japan has been actively pursuing missile defense capabilities, it like the United States promotes its programs with reference to the national security threat posed by the North. Its missile defense programs, which had existed since the early 1990s, accelerated after North Korea’s “Taepodong missile” test in 1998 and led to the cabinet decision to acquire missile defense systems in 2003. In recent years North Korea’s nuclear and missile “threats” have fueled, or been used to justify, the Abe cabinet’s drive to expand Japan’s military capability and reach and to weaken constitutional and other restraints. The drive is in turn exacerbating already tense security conditions in Northeast Asia.

The Ministry of Defense started deploying the Patriot systems (PAC-3) in 2007, and had 24 batteries of PAC-3 and six Aegis sea-based BMD operational by the end of 2016. Not only has it acquired missile defense systems such as PAC-3 and SM-3 from the United States, but it also cooperates with its ally to develop a more advanced system and to integrate Japan’s missile defenses with America’s. The cabinet included in its 2004 National Defense Program Guideline a plan to develop and manufacture a missile defense system jointly with the United States, and made an agreement with the Bush administration the following year to develop a new generation intercept missile. As per the agreement, Mitsubishi Heavy Industries participates in a joint project with Raytheon to develop the SM-3 Block IIA.

Furthermore, the Abe cabinet has used cooperation on missile defense as leverage to further its “pro-active contribution to peace,” expanding the scope and reach of US-Japan military cooperation and the geographic reach of the Japanese military far from its borders. As Japan increased its cooperation, such as moving its Missile Defense Command to a U.S. airbase and integrating its missile defense systems and America’s, the Constitutional ban on collective security emerged as a serious obstacle. In 2014, the Abe cabinet seized the issue to reinterpret the Constitution so that the Self-Defense Forces might provide U.S. forces protection against North Korean missiles outside Japan. Also, it leveraged the co-development of the SM-3 IIA slated for deployment in Europe to revise the 47-year old ban on weapons exports and adopt the “three principles of defense equipment transfers” (防衛装備移転三原則) the same year. One critical rationale for passing the security-related bills in 2015 was the need to collaborate with the U.S. military against the North’s nuclear missiles.

Missile Defense, China and Russia

These measures, all justified in terms of the threat posed by the North’s nuclear missiles, have in turn caused not only the North to take further countermeasures, such as developing a submarine launched ballistic missile (SLBM) that would render THAAD useless. Also they affect China’s security, expanding the chain of security dilemma further. THAAD radar stationed in South Korea, even if intended to monitor North Korea, has an effective range that can cover China. If the radar is configured as a Forward Based Mode (FBM) in which it relays tracking data to a remote missile defense system, its range can be as long as 3,000 km, enabling it to look deep into China. The radar in such a mode will be able to
monitor activities of China’s missiles and relay an early warning to the GMD in Alaska so that the U.S. may intercept the missiles mid-air. This can *de facto* deprive Beijing of its second strike capability and open to Washington the possibility to strike China first without worrying about retaliation from Chinese ICBM’s.

Following the extensive path of the security dilemma, the U.S. missile defense system now adversely affects China’s sense of security, prompting it to take countermeasures. Beijing has been particularly vocal about its opposition to THAAD that it views as a missile defense system that can be used against its strategic missiles, thereby destabilizing the strategic balance with the United States. Turning its opposition into actions, China has ratcheted up the pressure on South Korea in accordance with, and retaliation for, the steps taken by Seoul in preparation for THAAD deployment. Chinese authorities targeted the Lotte Group by conducting thorough audits and closing down almost half of them throughout China. Beijing also put a limit on visits to Korea, triggering a 40% drop in the number of Chinese visitors within a month. These measures are deepening Koreans’ worry that their economy may suffer yet greater blows in the coming months after the missile defense system is installed.

Moreover, Chinese have suggested military responses may be in order. Yang Yujun, spokesman for the Ministry of National Defense (MND), stated that China would “take necessary measures to safeguard China’s strategic security and regional strategic balance” in response to THAAD deployment. After the THAAD system was actually deployed in Songju in April 26, 2017, he pointedly referred to “realistic military exercises” and “new weapons systems” as possible responses. Chinese reactions are driven by their perception that THAAD is intended not to protect South Korea but rather to serve as part of U.S. global missile defense systems.

This is a view shared by Russians. While Russians are not directly affected by THAAD, they too suspect that it is part of a global missile defense system that the United States is constructing against Russia and China. In his opening address at the 6th Moscow Conference on International Security on June 26, 2017, Sergey Lavrov, Russian Foreign Minister, specifically called THAAD in Korea “part of the US global missile defence shield” that could lead to “catastrophic consequences for the Korean Peninsula and Northeast Asia in general.” Russians perceive THAAD in Korea and the Aegis-Ashore systems in Europe as part of the global missile defense system being built by the U.S., and criticize the missile defense systems in Europe as such. Russian analysts are particularly alarmed that the Pentagon plans to deploy in Poland the SM-3 IIA—that is being jointly developed with Japan—that has the capability to intercept Russian ICBMs. Putin warned, in response to the perceived threat, that he was being “forced to consider
measures to neutralize the increasing threat to
Russia’s security.”

Thus Russians and Chinese have found a
common ground in their shared concern about
and their opposition to U.S. missile defense
systems. Xi Jinping and Vladimir Putin
expressed in a joint statement in June 2016
“concern over the unilateral deployment of
anti-missile systems all over the world,”
specifically naming the Aegis Ashore in Europe
and the Terminal High Altitude Area Defense
(THAAD) in northeast Asia, because it “has
negatively affected global and regional
strategic balance, stability and
security.”16 Their joint opposition was further
supported by the member states of the
Shanghai Cooperation Organization who
expressed their shared concern that “unilateral
and unlimited build-up of missile defense
systems by one state or group of states, without
taking into account the interests of other
countries, can be harmful to international and
regional security and stability.”17

Not only have Russians and Chinese expressed
their common opposition to what they perceive
as U.S. efforts to establish global missile
defense systems, they have also increased their
collaboration to counterbalance increasing
military cooperation among the United States,
Japan, and South Korea. In short, the result has
been an acceleration and intensification of an
arms race in the Korean Peninsula, Northeast
Asia and the world. THAAD, a little known
missile defense system, may well be the
proverbial mouse that shakes the mountains,
except that it holds the danger to explode them
altogether.

**Denuclearization and De-escalation?**

Can we get out the security dilemma? John H.
Herz originally coined the concept not to
remind us that we are condemned to the
inevitability of the security dilemma but to alert
us to the barrenness of what he called “cynical
realism” that power only determines the
outcome of international relations. He
suggested that a realistic understanding of the
security dilemma was essential but a dose of
idealism would be needed in order to devise a
way out of the gloomy reality. Hence he called
for “realist liberalism.”

The “liberalism” that is currently missing in the
realism of the arms race can perhaps be
recovered from the past. The past quarter
century of the “North Korean nuclear crisis”
includes important periods when the crisis was
attenuated and managed with diplomacy. The
Geneva Agreed Framework of 1994 and the Six
Party Talks process represent remarkable
achievements that froze and then disabled the
North’s nuclear facilities and brought the
involved parties to not just a negotiation over
the nuclear weapons issue but also a discussion
of creating peace in the region. While their
failure to bring about the ultimate goal—the
denuclearization of the Korean Peninsula and a
peace regime—is commonly held up as
evidence of their ineffectiveness, their interim
accomplishments look much more impressive
than the results of the military confrontation
and sanctions that subsequently prevailed.
Negotiations succeeded in slowing down the
North’s nuclear and missile activities and held
out the possibility to trade them with peace;
hardline policies resulted in six nuclear tests
and countless missile launches by Pyongyang
as well as heightened tensions and global arms
races. The contrast could not be starker.

Those who still advocate more pressure and
hardline policies are “cynical realists” who
refuse to learn from reality. Given that the grim
reality of the arms races was triggered by
THAAD systems and that the missile defense
systems were justified in terms of the threats
posed by North Korea’s nuclear and missile
programs, a realist liberal search for a solution
may as well start with the past successes in
rolling back the North’s programs through the
negotiations with Pyongyang. A new round of
negotiations can perhaps help complete the
unfinished journey toward denuclearization and a peace regime. It should be born in mind that Pyongyang held out a prospect of negotiations at its 2016 party Congress.\textsuperscript{18} A spokesman for the DPRK government took a step further: he announced in its most authoritative statement yet on July 6 2016 its commitment to the denuclearization of the Korean Peninsula by calling the goal “the injunction [유훈] left by Kim Il Sung and Kim Jong Il and the unwavering will of the party, the military and the people”\textsuperscript{19} It would be foolish to take its words at face value; but it would be potentially disastrous to turn a blind eye to the opening for negotiation.

**Related articles**

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**Notes**


4 The Obama administration denied North Korea—which had left the NPT—the benefit of its negative security assurance by “declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the Nuclear Non-Proliferation Treaty (NPT) and in compliance with their nuclear non-proliferation obligations” (15). Department of Defense, *Nuclear Posture Review Report*, (Washington, DC, 2010), p. 15.

5 Yi Yong-in, “Expert rebuts Defense Ministry’s claims about THAAD missile interception,” Hankyoreh, February 17, 2016. [accessed on April 30, 2017]

6 An EMP attack involves detonation of a nuclear device at high altitude that produces an electromagnetic wave to cripple electronic communications and strike a blow at electricity and communications.

7 Amy Butler, “MDA Still Sees 2018 Deployment In Restructured SM-3 IIA Plan,” Aerospace
The system was flight-tested in December 2015 and October 2016, and made a successful intercept test in February 2017.

The cabinet justifies its decision with a reference to the U.S. that “同盟国である米国及びそれ以外の諸国との安全保障・防衛分野における協力の強化に資するものである” [Such transfer also contributes to strengthening security and defense cooperation with Japan’s ally, the United States as well as other countries.] See here and here [accessed on April 28, 2017] Its Implementation Guidelines opens the door to export weapons to Europe by including “米国を始め我が国との間で安全保障面での協力関係がある諸国 [countries cooperating with Japan in security including the U.S.]” See here and here [accessed on April 28, 2017]


"Statement by Ambassador Wang Qun, Director-General of the Arms Control Department of the Ministry of Foreign Affairs of China, at the General Debate of the First Committee of the 71st Session of the UNGA." October 13, 2016. [accessed on April 24, 2017]

Foreign Minister Sergey Lavrov’s remarks at the Sixth Moscow Conference on International Security, Moscow, April 26, 2017. [accessed on April 29, 2017]


The Tashkent Declaration of the Fifteenth Anniversary of the Shanghai Cooperation Organization, June 26, 2016.

See also “陸退將：可外科手術定點清除THAAD,” CNA News, March 2, 2017. [accessed on April 23, 2017]