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 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 counter-measures, 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.3 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 six 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.4 Pyongyang indeed justifies its nuclear weapons development in terms of security threats it alleges it has received from the United States.


4 The Obama administration denied North Korea—that 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.
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.

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, to protect its troops and ally in South Korea against the North’s short-range missiles. In response to longer-range missiles, it operates SM-3 systems on 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 in the region with the dispatch of two more Aegis ships to the western Pacific, the deployment of a THAAD system in Guam, and the addition of 14 interceptor missiles to the ground-based missile defense system in Fort Greely, Alaska. If Aegis and THAAD are designed to protect soldiers and civilians in Japan, South Korea and Guam against intermediate-range ballistic missiles, the

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5 The Park Geun-Hye administration was in the process of implementing and practicing these plans to strike the North first and remove its leadership before it could hurt them. These measures, taken by the South to respond to the North's moves, in turn deepened the latter's sense of insecurity and ended up raising the tension over the Korean peninsula.

Ground-based Midcourse Defense (GMD) is designed to intercept an ICBM whose trajectory from North Korea would fly over 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. And yet, the radar based in Alaska is too far beyond the horizon to observe a launch or early flight of an ICBM from the North. An AN/TPY-2 radar in the South can fill the gap in the critical early phase by detecting an ICBM launch and relaying 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 along the path taken by the Kwangmyongsong satellite, the radar could serve as a critical early detection system that relays its early flight path to the missile defense systems—for example, Aegis ships equipped with SM3 systems—operating in the region. THAAD’s interceptor missiles also can be employed to shoot down the EMP device during its ascent. The following maps show the two possible paths that North Korea’s ICBM or satellite could take to reach the U.S. continent.

It is thus at least plausible that the U.S. military views the THAAD as a defense against North Korea’s potential capability to harm itself. But against the background of the mutual balance of threat that maintains a cold peace over the peninsula, its missile defense may be perceived by the North Koreans as an attempt to neutralize their deterrent and thus gain a first-strike capability.

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, particularly the nose cone, rocket motors, and steering control section for the missile. Japan spent roughly the same amount of money on the project, $1.5 billion by 2012, as the U.S. did.9 The system was flight-tested in December 2015 and October 2016, and made a successful intercept test in February 2017.10

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” (防衛装備移ー 三原則) the same year.11 One critical rationale for passing the security-related bills in 2015 was the need to


11 The cabinet justifies its decision with a reference to the U.S. that “同盟ーである米ー及びそれ以外の諸ーとの安全保障ー防衛分野における協力のー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.
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.

Figure 2) THAAD radar in South Korea may monitor China

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. Immediately after Seoul and Washington announced their decision to deploy THAAD in July 2016, Foreign Ministry Spokesperson Hong Lei stated that its deployment would “sabotage the strategic security interests of regional countries including China and regional strategic balance.” Ministry of National Defense Spokesperson Yang Yujun further asserted that, in response to THAAD deployment, China will “take necessary measures to safeguard China’s strategic security and regional strategic

balance.”  

Fan Changlong, Vice Chairman of the Central Military Commission, warned in a meeting with the U.S. national security advisor that “U.S. insistence on deploying the [THAAD] system in South Korea will . . . severely undermine the China-U.S. strategic mutual trust.”

Turning its warnings into actions, China ratcheted up the pressure on South Korea in accordance with, and retaliation for, the steps taken by Seoul in preparation for THAAD deployment. After the Lotte Group consented to Korea’s Ministry of National Defense request to convert its golf course into a base for THAAD, Chinese authorities intensified pressure on the group by conducting thorough audits, safety and sanitary inspections of its businesses and closing down almost half of them throughout China. Beijing was reported on March 2, 2017, just days after Seoul started preparing a base for THAAD, to direct Chinese travel agencies to stop selling Korea travel packages, triggering a 40% drop in the number of Chinese visitors within a month. Such a precipitous drop dealt a serious blow to Korea’s tourist industry for which Chinese made up almost half of foreign visitors. Following a series of smaller scale yet visible punitive measures such as a cancellation of K-pop stars’ scheduled performances in China, these measures deepened Koreans’ worry that their economy might suffer yet more in the coming months after the missile defense system was installed.

More directly relevant to my discussion of the security dilemma are Chinese suggestions that military responses would 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.

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the THAAD system was actually deployed in Songju in April 26, 2017, he pointedly remarked that China’s military would protect the nation’s safety and the region’s stability with “realistic military exercises” and “new weapons systems.” If he was vague about specifics, others filled in details. Luo Wian (羅援), a retired General, suggested in an op ed in the Global Times (環球時報) ten responses including a surgical strike, a saturation attack, and a soft kill. Another military specialist stated in an interview with the Global Times that if THAAD is deployed, Songju will become a target of the rocket force that operates China’s strategic nuclear missiles.

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. Wang Qun, Director General of the Arms Control Department of the PRC Foreign Ministry asserted in a speech to the UN General Assembly that the U.S.-ROK THAAD deployment decision was linked to the U.S. effort to deploy a global missile-defense system.

The issue of missile defense system concerns global strategic stability and mutual trust between major countries. The deployment of global missile defense systems by the U.S. seriously undermines the strategic security interests of related countries. It will impede the nuclear disarmament process, trigger regional arms race [sic], and escalate military confrontation. Particularly the deployment of the THAAD system by the U.S. in the ROK will in no way help address the security concerns of relevant parties, realize denuclearization of the Korean Peninsula and maintain peace and stability on the Peninsula.

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

[accessed on April 24, 2017]


20 김귀근. “中 ‘성주 타격’ 도ね는 협박...한미, 사드 조기배치 ‘맞볼’ ” 연합뉴스, 03.01 2017. http://www.yonhapnews.co.kr/bulletin/2017/03/01/0200000000AKR20170301072200014.HTML?input=1195m [accessed on April 23, 20107]

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] has an especially destabilising effect” and warned of “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., as can be seen in Lavrov’s statement, and criticize the missile defense systems in Europe as such. Their suspicion was consolidated when Washington did not stop its missile defense program in Europe—the European Phased Adaptive Approach (EPAA)—that it alleged was aimed at Iranian missiles even after having reached an agreement with Teheran. Russian analysts note that the MK-41 launch pad used for the Aegis-Ashore can also be used by such intermediate range cruise missiles as Tomahawk against their country. They are particularly alarmed that according to the EPAA 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. Suggesting that the American Aegis-Ashore missile defense system already deployed in Romania in May 2016 was part of U.S. strategic nuclear force, 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.” Some Russian analysts have made more pointed warnings that the Aegis-Ashore systems in Europe will be targeted with Russian missiles such as Kalibir cruise missiles used in Syria. Others have mentioned the use of Sukhoi Su-34 strike fighters as a possible response.

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” because it “has negatively affected global and regional strategic balance, stability and security.” They specifically mentioned that they were “strongly opposed to the deployment of the Aegis Ashore ballistic missile defense system in Europe and the possible deployment of the Terminal High Altitude Area Defense (THAAD) in northeast Asia, which severely infringe upon the strategic security interests of countries in the region.” The statement was filed with the United Nations as an official document on July 8th, 2016, the day when Seoul and Washington announced THAAD deployment, to bring their concern to global attention. Their joint opposition was further supported by the member states of the Shanghai Cooperation Organization who noted the “inadmissibility of ensuring own security at the cost of the security of others” in the Tashkent Declaration of the Fifteenth Anniversary of the Shanghai Cooperation Organization in June 2016. They 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.”

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. A spokesman

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24 The Tashkent Declaration of the Fifteenth Anniversary of the Shanghai Cooperation Organization, June 24, 2016.

25 See JJ Suh, “Half Full or Half Empty? North Korea after the 7th Party Congress,” The Asia-Pacific
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” It took South Korea’s Moon Jae-In to take advantage of the Pyeongchang Winter Olympics to explore the possibility of negotiations left open by Pyongyang. The current round of diplomacy holds the potential to help move the peninsula towards denuclearization and peace, and the THAAD, and missile defense systems in general, would have to be addressed as part of the process.

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Figure 1) The red lines in the top map 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 line in the bottom two shows a trajectory a satellite can take, possibly delivering an EMP attack.
Figure 2) A THAAD radar stationed in South Korea can be configured to track China’s ICBM’s and relay the data to a missile defense system in Alaska so that the missiles can be destroyed before they reach their intended targets in the U.S.

https://mostlymissiledefense.files.wordpress.com/2016/07/tpy-2longrange-track.png