

Selected Essays on the Transition to a New Nuclear Order

Judith Reppy and Catherine McArdle Kelleher, eds.

Strategic Stability of the China-ROK-Japan Triangle

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General Security Relations among the Three

The triangular interaction among China, South Korea, and Japan has important implications for the overall stability of East Asia. Among the three countries, China and South Korea's security relationship is most stable, despite some minor bilateral security problems. For example, the two countries' self-proclaimed exclusive economic zones overlap in the Yellow Sea, and they have not successfully reached an agreement on a maritime boundary in their ongoing maritime demarcation negotiation. This has sometimes led to violent clashes between Chinese fishermen and the South Korean Coast Guard. The dispute over the Jeodo/Suyan Rock in the Yellow Sea has not been resolved either, but both China and South Korea agree that the submerged rock has no territorial status and therefore it does not constitute a territorial dispute. The two countries' respective air defense identification zones also overlap over part of the Yellow Sea, but it is not regarded as a major security concern by Beijing or Seoul. In sum, there are no territorial dispute or other major bilateral security problems between the two (security problems involving the U.S.-ROK alliance is a different matter). Given the increasingly warm economic and political interaction, neither Beijing nor Seoul sees the other as a direct security threat. Their mutual threat perception is mostly nonexistent except when external players such as the United States and North Korea come into the equation.

In comparison, the Sino-Japanese security relationship is much more troublesome. This results partly from deeply-buried historical antagonism, which gets re-evoked each time senior Japanese officials pay tribute to the Yasukuni Shrine or rightist Japanese officials make provocative remarks on history. Bilateral security tensions are also fueled by territorial disputes – mostly over the Senkaku/Diaoyu Islands. Extended confrontations over the disputed islands have diminished bilateral trust and reduced mutual favorable public perception to a historical low level. Rising nationalist sentiment in China adds fuel to the tension. Top leaders from the two countries find it difficult to initiate high-level visits and exchanges. On top of that, facing the increasingly intensive competition between the United States and China, Japan gives the impression to China that Japan has given up on the hope it could repair relations with China and

has decided to side completely with the United States to contain China. Beijing, therefore, is increasingly showing a cold shoulder to Tokyo. As the Sino-U.S. relationship faces constant troubles, the ever closer Japan-U.S. security alliance is seen by China as an increasing threat.

The ROK-Japan security relationship is less turbulent but not problem-free. Both being U.S. allies, the two countries have conducted important and pragmatic cooperation to address common security concerns. With that said, their security relationship has been hindered by both history problems and the territorial dispute over Dokdo/Takeshima Island. The recent Japan-South Korea agreement on comfort women was intended to remove one major barrier between the two, but it does not seem to have the potential to dramatically change mutual perceptions. Unlike China and ROK, who do not see each other as direct security threats, South Korea is concerned about Japan. Recent polls show that more than seventy percent of South Korean public have an “unfavorable” impression toward Japan.¹ High-level South Korean officials were reported to claim that a nuclear-armed Japan would be a greater threat for South Korea than nuclear-armed China, or even nuclear-armed North Korea.²

North Korea as an Additional Factor

North Korea greatly complicates South Korea and Japan’s threat perception with respect to China. Some Korean and American analysts suspect China of deliberately prolonging the Kim regime in North Korea and keeping the Korean peninsula divided to maximize China’s own geostrategic interests. Such a view, however, is a too cynical understanding of Chinese interests in the region. Despite the special historical relationship between Pyongyang and Beijing, most Chinese experts do not seem to embrace any particular concern about a reunified Korean peninsula as long as the issue of American military presence in the post-unification scenario can be addressed to Beijing’s satisfaction. Furthermore, the value of North Korea serving as a buffer zone for China also varies, depending on how much of a direct security threat China perceives from the United States. If China believes the United States is making every effort to contain China, especially militarily, China might see some value in having North Korea absorb some of

¹ “The 2nd Joint Japan-South Korea Public Opinion Poll (2014): Analysis Report on Comparative Data,” (The Genron NPO and East Asia Institute, July 2014).

² John Lee, “The Strategic Cost of South Korea’s Japan Bashing,” *Business Spectator* (November 5, 2014); Mark Fitzpatrick, “Republic of Korea,” (*Adelphi Series*, 55: 455, 2015).

that pressure from the United States. That said, North Korea's brinkmanship strategy and frequent provocations are driving the United States, South Korea, and Japan to greatly reinforce their military posture and deepen security cooperation. Many of these measures, although not directly aimed at China, have a serious and negative impact on China and undermine Chinese security interests. Instead of being a buffer zone for China, North Korea on the contrary is in fact introducing new military threat to China. Therefore, the value for China to keep North Korea alive as a buffer zone for China is in general declining. China, South Korea, and Japan do not have fundamentally conflicting interests on the Korean peninsula, although their orders of priorities are somewhat different.

Most analysts attribute China's resistance toward implementing sweeping economic embargoes and sanctions against North Korea to Chinese concerns about a refugee crisis and border security in the aftermath of regime collapse in the North. This is certainly true. But there could be a more severe threat facing China, if China were to impose sweeping economic sanctions against the North and before the North Korean regime subsequently collapsed. Cutting off the lifeline for North Korea by China might be announced by the desperate North Korean leadership as China's de facto declaration of war against them. China would therefore face the risk of having itself become a direct enemy of North Korea. According to the North Korean way of retaliation, China could very well end up being explicitly or implicitly threatened by North Korea's military or even nuclear capability. With North Korea's nuclear weapons in the hands of a leadership that has demonstrated provocative and unpredictable patterns of behavior, making China be seen as a direct threat to North Korea is the first thing that Chinese leaders want to avoid. In this sense, imposing sweeping economic sanctions on North Korea is not a feasible option for China.

Inadequate understanding about Chinese expectations for the endgame on the Korean peninsula has caused South Korean and Japanese concerns about China. Moreover, lack of Chinese participation in discussions about joint contingency planning or coordination among regional players in case of North Korean instability has also driven up concerns about Chinese objectives and role in scenarios of a North Korea crisis. All these contribute to security concerns about China in Seoul and Tokyo. Given the political sensitivity, China might continue to resist discussions about scenarios of North Korean collapse, but bilateral or multilateral discussions

with South Korea and Japan about each other's assessment of North Korea's fast growing nuclear and missile capability could help them better understand and coordinate each other's North Korea policy. Even Track II dialogues at an unofficial level on such issues would be beneficial.

Nuclear Hedging in the Region

China (and South Korea, to some extent) has real concerns about Japan's nuclear hedging capability. Regarding material capability, Japan is the only Non-Nuclear-Weapons State under the Nuclear Nonproliferation Treaty that has both commercial-scale reprocessing and enrichment capability. Japan's large plutonium stockpile draws close Chinese attention, and many Chinese experts attribute this large plutonium stockpile to a deliberate policy choice rather than problematic planning, mismanagement, and domestic politics between Tokyo and prefectures. Furthermore, Japan's M-V and H-II rockets have the potential to deliver a heavy nuclear payload over long distances. Japan has also demonstrated the capability to retrieve unmanned spacecraft and the upper stage of an H-IIB rocket³ – technology that could be useful in building nuclear warhead reentry vehicles.

Regarding Japan's policy objectives, China believes that Japan is deliberately pursuing a nuclear hedging strategy. The secret studies conducted by Japanese governments during the Cold War recommended against a nuclear weapons program but recommended accumulating the dual-use technologies useful for obtaining a virtual military nuclear capability. Senior Japanese officials' open remarks about nuclear hedging have reinforced Chinese concern.⁴

With that said, most Chinese experts don't expect Japan to go beyond its nuclear hedging strategy and to actually pursue nuclear weapons.⁵ The normative and institutional restraint of the existing international nonproliferation regime and domestic restraint in Japan are strong enough

³ Kazuo Takase et al., "Successful Demonstration for Upper Stage Controlled Re-Entry Experiment by H-IIB Launch Vehicle," *Mitsubishi Heavy Industries Technical Review* 48, no. 4 (2011).

⁴ "Japan's Pro-Bomb Voices Rise as Nuke Power Debated," Associated Press, July 31, 2012, <http://www.foxnews.com/world/2012/07/31/japan-pro-bomb-voices-grow-louder-amid-nuke-debate.html>.

⁵ Xiangli (孙向丽) Sun, Jun (伍钧) Wu, and Side (胡思得) Hu, "Japan's Plutonium Issue and International Concern (日本钚问题及其国际关切)," *Contemporary International Relations* (现代国际关系), no. 3 (2006).

to prohibit Japan from openly going nuclear. As long as Japan does not openly pursue nuclear weapons, Tokyo's nuclear hedging capability is not a particular concern for China, even though its nuclear hedging policy could have significantly negative implications for the international nonproliferation regime.

In the same vein, China watches closely as South Korea seeks to obtain and commercialize sensitive fuel cycle capabilities and it suspects that South Korea has a similar interest in some sort of nuclear hedging capability. High level domestic public support for nuclear weapons in South Korea also unnerves China, but at the end of the day, the prospects for Seoul to ultimately decide to pursue nuclear weapons seem extremely low.

Nuclear Stability in the Region

What really concerns China is that Japan and South Korea may work together with the United States – deliberately or not – to undermine China's strategic nuclear deterrent vis-à-vis the United States. Even though China has been gradually modernizing and slowly expanding its nuclear arsenal in recent decades, there is still debate among foreign analysts about whether China has achieved assured nuclear second strike capability against the United States. Some American scholars believe Chinese nuclear forces are still vulnerable to an American first strike,⁶ whereas Chinese scholars point out Chinese nuclear retaliation capability against the United States is uncertain but they are working hard to minimize the remaining uncertainty.⁷ Recent Chinese moves to field more capable road-mobile intercontinental ballistic missiles (ICBMs) and to introduce sea-based nuclear weapons are clear signals that China wants ultimately to remove this uncertainty and achieve an assured second strike capability vis-à-vis the United States. For China, Beijing's credible second strike capability vis-à-vis Washington is the foundation for maintaining strategic stability in the region. The Chinese efforts to achieve this goal, however, can be undermined by Japanese and South Korean military cooperation with the United States.

⁶ Keir A Lieber and Daryl G Press, "U.S. Nuclear Primacy and the Future of the Chinese Deterrent," *China Security*, Winter (2007); and "The End of Mad? The Nuclear Dimension of U.S. Primacy," *International Security* 30, no. 4 (2006).

⁷ Riqiang Wu, "Certainty of Uncertainty: Nuclear Strategy with Chinese Characteristics," *Journal of Strategic Studies* 36, no. 4 (2013); *ibid.*

China's greatest concern about its future nuclear deterrent is the U.S. missile defense system, which has received persistent investment and achieved sustained improvement. Japan has been incorporated into the American missile defense network in Asia through the joint development of the SM-3 IIA interceptor and Japan's deployment of SM-3 IA/B interceptors on Aegis ships. Japan already hosts two AN/TPY-2 X-band radars and is further considering introducing land-based SM-3 systems and the Terminal High Altitude Area Defense (THAAD) batteries. China worries that advanced SM-3 interceptors may have the potential to engage Chinese ICBMs in the future.

South Korea is considering allowing the United States to deploy a THAAD battery on its territory, too, following the fourth North Korean nuclear test and the subsequent satellite launch. Some Chinese experts are concerned that the AN/TPY-2 X-band radar of the THAAD system is capable of closely monitoring the warheads and decoys release process of Chinese ICBMs to be launched from Northeast China. This may improve the United States' capability to distinguish real Chinese warheads from decoys and therefore increase the chances of successful interception.⁸

China is putting together a fleet of nuclear strategic ballistic missile submarines (SSBN) and having them conduct patrols. Part of the Chinese motivation for building this SSBN fleet seems to be the perceived capability of SSBN and the submarine-launched ballistic missiles (SLBM) to penetrate existing U.S. missile defense systems.⁹ However, U.S. regional allies, especially Japan, have been working closely together with the United States to enhance anti-submarine warfare (ASW) capabilities in the Asia Pacific, which poses a major threat to China's sea-based nuclear deterrent. Japan's participation in the American ASW network in the region is a particular concern for China, because if Chinese SSBNs are to conduct patrols in the West Pacific, they will have to pass through water channels along the so-called First Island Chain, and some of the

⁸ Riqiang (吴日强) Wu, "U.S. To Deploy Thaad in South Korea: Implications for China's National Security (美国要在韩国部署“萨德”，对中国国家安全会有哪些影响？)," Tengxun Jiangwutang (腾讯讲武堂), http://www.globalview.cn/html/military/info_9055.html.

⁹ Xiaosong (寿晓松) Shou, *The Science of Military Strategy (战略学)* (Beijing: Military Science Press (军事科学出版社), 2013; *ibid.*

most important water channels are immediately adjacent to Japanese-controlled territories. Therefore Japan is in a strategically advantageous position to help the U.S. Navy to track, trail, and even disrupt Chinese SSBNs on their patrol routes. In recent years, Japan has worked jointly with the United States to upgrade the underwater sound surveillance system that the United States first deployed during the Cold War.¹⁰ With the most formidable ASW capability in the region, Japan participates frequently in joint ASW training and exercises with the U.S. Navy, and is sending anti-submarine reconnaissance aircraft to fly over the South China Sea.¹¹ Given that a major portion of China's SSBN fleet is presumed to be deployed in the South China Sea, Japan's increased ASW operations over that area constitute a significant and increasing threat to China's nuclear deterrent.

To a lesser extent, enhanced ROK-U.S. ASW cooperation – especially after the Cheonan incident in 2010 when a South Korean corvette was reportedly sunk by North Korea – also draws Chinese concern. So far the focus of South Korean ASW investment in recent years and ROK-U.S. ASW cooperation has been to counter the North Korean submarine threat, but given that China has a nuclear submarine base next to the Yellow Sea and not far from South Korea, Chinese analysts worry that the incorporation of South Korea into the American ASW network in the region poses a new threat to China's nuclear deterrent.

From the Chinese perspective, America's Asian allies have an interest in undermining Sino-U.S. strategic stability. Japan, for instance, is very concerned that a mutually assured destruction (MAD) relationship between Beijing and Washington will effectively reduce the danger of conventional conflicts escalating to the nuclear level. Thus Japan worries that a stable Sino-U.S. nuclear relationship might increase Japan's vulnerability to China's nuclear coercion and might also embolden China's conventional military aggression against Japan.¹² It is partially because of

¹⁰ Desmond Ball and Richard Tanter, *The Tools of Owatsumi: Japan's Ocean Surveillance and Coastal Defence Capabilities* (Canberra, Australia: Australian National University Press, 2015); Lyle Goldstein and Shannon Knight, "Wired for Sound in the 'near Seas'," *Proceedings*, no. 4; Owen R. Cote Jr., "Assessing the Undersea Balance between the U.S. And China," (SSP Working Paper, February, 2011).

¹¹ Tao Zhang, "Expert: China Should Monitor Japan's Aircraft That May Fly over South China Sea," *China Military Online* (2016).

¹² Sugio Takahashi, "Rebuilding Deterrence: Post - 2015 Defense Guidelines Challenges Facing the U.S. - Japan Alliance," (Washington, DC: Project 2049 Institute, May 2015).

such Japanese concern that the Obama administration has so far decided not to openly acknowledge the existence of a mutual vulnerability relationship with China.

Some American scholars hold the view that the United States needs to maintain a superior nuclear capability over China in order to bolster its own deterrence posture and to enhance the credibility of American extended nuclear deterrence for allies.¹³ At least in theory, there is no conflict between the United States maintaining a superior nuclear capability over China and China maintaining an assured second strike capability vis-à-vis the United States, as long as Washington does not seek nuclear primacy (first strike capability) against China and does not pursue unlimited nuclear superiority that comes close to nuclear primacy. In this sense, more reassurance from Beijing that it does not object to U.S. nuclear superiority and does not seek nuclear parity with Washington may help to reduce Japanese concerns about a stable Sino-U.S. nuclear relationship.

Conventional Capabilities and Nuclear Stability

Among the three countries, mutual threat perception between China and South Korea and between South Korea and Japan is at relatively low levels. But the same cannot be said about Japan and China. Because of China's unconditional No First Use policy and U.S. extended nuclear deterrence, Tokyo is not so much concerned about Beijing's nuclear weapons per se. By contrast, Tokyo is very much concerned about Beijing's conventional military capability, which could play a direct role in a hypothetical military conflict over the Senkaku/Diaoyu Islands or in a conflict over the Taiwan Strait that might get Japan involved.

What is more troublesome for Tokyo is that Beijing is quickly catching up and may even be outrunning Japan in conventional military capability development. Even some American scholars worry that China may obtain some conventional military superiority vis-à-vis Japan and the United States in some restrained regional theatres in the near future. A 2015 RAND report on the U.S.-China military balance, for instance, points out that "PLA forces will become more

¹³ Matthew Kroenig, "Nuclear Superiority or the Balance of Resolve? Explaining Nuclear Crisis Outcomes," *Explaining Nuclear Crisis Outcomes* (2009). Available online at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1452250.

capable of establishing temporary local air and naval superiority at the outset of a conflict,” which “might lead Chinese leaders to believe that they could deter U.S. intervention in a conflict between it and one or more of its neighbors.”¹⁴ In anticipation of possible Chinese conventional superiority in the future, some scholars in the United States have argued for re-emphasizing the role of nuclear weapons – especially the so-called “tailored” nuclear capabilities that can be employed more flexibly on the battlefield.¹⁵ Some others predict that U.S. Asian allies such as Japan should consider their own nuclear option.¹⁶ All these propositions run the risk of drawing us back into the old nuclear arms race and proliferation dynamics of the Cold War and undermine international efforts to promote nuclear arms control.

To contain the conventional arms race and to prevent it from undermining nuclear stability, it is time for the countries in the region to start having discussions about better openness and even potential restraint in conventional military development and deployment. In this regard, the European conventional arms control practices and confidence-building measures may have some lessons to offer for Northeast Asia (significant adjustment and adaptation will certainly be required). Given that unpredictability and uncertainty over each other’s future military development and deployment are major drivers for arms competition in Northeast Asia, transparency and confidence-building measures like those adopted at the 1986 Stockholm Conference on Confidence- and Security-Building Measures and Disarmament in Europe can be considered by Northeast Asian countries. On the other hand, countries in this region should also seek to reach a consensus on reducing (or at least not raising) the role of nuclear weapons in their respective national security strategies. China is a long-time supporter for mutual and multilateral No First Use agreements and for constraining the role of nuclear weapons; Japan has miserable memories of the consequences of nuclear weapons; and South Korea is also a victim of North Korea’s nuclear saber-rattling. Therefore, all three countries should have shared interests and common views about reducing the role of nuclear weapons. They could play a more important role by working together to promote the humanitarian initiative on nuclear weapons.

¹⁴ Eric Heginbotham et al., “The U.S.-China Military Scorecard: Forces, Geography, and the Evolving Balance of Power 1996-2017,” (Santa Monica, CA: RAND Corporation, 2015).

¹⁵ Clark Murdock, et al., “Project Atom: A Competitive Strategies Approach to Defining U.S. Nuclear Strategy and Posture for 2025–2050” (Washington, DC: Center for Strategic and International Studies, May 2015).

¹⁶ Harvey M. Sapolsky and Christine M. Leah, “Let Asia Go Nuclear,” *The National Interest* (April 14, 2014).

Last but not least, as discussed above, nuclear stability in the region can be seriously affected by missile defense, ASW, and other conventional military development and deployment by non-nuclear states such as Japan and South Korea. To stabilize the existing nuclear relationship and to prepare the ground for cooperative nuclear reductions in the future, all countries in the region – including the United States, China, Japan, and South Korea – should have dialogues about the interactive relationship between conventional and nuclear capabilities and work toward a collective framework for containing arms race and reducing negative interactions.

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