Routledge
Taylor & Francis Group

Journal for Peace and Nuclear Disarmament

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rpnd20

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To cite this article: Michiru Nishida (2023) Changing Security Environment in East Asia and Its Implications on Japan's Nuclear Policy, Journal for Peace and Nuclear Disarmament, 6:2, 327-345, DOI: 10.1080/25751654.2023.2285024

To link to this article: https://doi.org/10.1080/25751654.2023.2285024

Published online: 30 Dec 2023.

JOURNAL FOR PEACE AND NUCLEAR DISARMAMENT
2023, VOL. 6, NO. 2, 327–345
https://doi.org/10.1080/25751654.2023.2285024

Changing Security Environment in East Asia and Its Implications on Japan's Nuclear Policy

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ABSTRACT

The basic framework of Japan's nuclear policy, consisting of four pillars, was established just before the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) was opened for signature in 1968. Since then, the security environment in modern Japan, surrounded by three nuclear-armed states (China, North Korea, and Russia) that are willing or not hesitant to change the status quo by force, has increasingly become more challenging. The new National Security Strategy of Japan made public in December 2022 states that "Japan's security environment is as severe and complex as it has ever been since the end of World War II". Despite this severe security environment, there is no indication of significant changes in the basic framework of Japan's nuclear policy. However, with increasing discussions in the Japanese security community that the strike capability gap with China needs to be filled with nuclear weapons and that Japan should promote nuclear operational integration with the United States, Japan's security policy may rely more on nuclear weapons, which could end up conflicting with Japan's current nuclear disarmament policy, even while the basic framework as above remains the same, in particular unless and until the strike capability gap is addressed by fielding counterstrike capabilities. Such policy decisions should be made in a balanced manner so that these would not create a significant security dilemma and not increase the risk of military conflict in the region, in which case the possibility of escalation to the risk of nuclear weapons use cannot be ruled out.

ARTICLE HISTORY
Received 18 January 2023
Accepted 14 November 2023

KEYWORDS
China's nuclear build-up; North Korea's nuclear and missile development; nuclear sharing; treaty on the prohibition of nuclear weapons (TPNW); no first use; counterstrike capabilities

Introduction

The Russian invasion of Ukraine that began on 24 February 2022, was accompanied by nuclear saber rattling by Russia, which shocked the world. Japan was no exception. Russia's invasion strengthened the discourse that the biggest factor behind the invasion of Ukraine was the loss of nuclear deterrence when it handed over its nuclear weapons to Russia, even though Ukraine became "the world's third largest nuclear power" after the collapse of the Soviet Union. Experts refuted this discourse based on facts (Akiyama 2022), but the debate over nuclear weapons in the Japanese discourse became heated, in

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particular as the late former Prime Minister Abe first called for the discussion of "nuclear sharing", stating that "Although Japan is a signatory of the NPT and has adopted the Three Non-Nuclear Principles,[1] we should not regard a discussion on how the world's security is maintained as taboo" (Asahi Shimbun 2022a). He repeated his calls for discussions on nuclear sharing afterwards. One of the main opposition parties, Nippon Ishin (Japan Innovation Party), responded positively to the call and even called for reassessing the three Non-Nuclear Principles (Asahi Shimbun 2022b), although Nippon Ishin dropped the part of the call for reassessing the three non-nuclear principles on the next day due to strong criticism (Asahi Shimbun 2022c).

The discussion on "nuclear sharing" gradually calmed down, as Prime Minister Kishida and the Japanese government immediately denied the possibility at a meeting of Japan's Upper House Budget Committee the day after former Prime Minister called for discussions and at subsequent meetings of the Japanese Diet and many Japanese security experts were negative on nuclear sharing, in particular the physical part of sharing practiced in the NATO, due to its negative implications on crisis stability (Jimbo 2022a; Murano 2022b; Shimbun 2022). In mid-March 2022, the ruling party, the Liberal Democratic Party of Japan (LDP), held a panel on national security with the attendance of security experts. LDP's director of the National Defense Division, Hiroyuki Miyazawa, said after the meeting that almost everyone agreed that nuclear sharing is not appropriate for Japan (Johnson 2022a; Nikkei 2022). LDP's proposal to the Japanese government the next month on the new national security strategy ended up with no reference to nuclear sharing (Liberal Democratic Party 2022). The nuclear debate continues to be active in public discourse in Japan, however, as Russia's aggression in Ukraine continues with the revelation of the massacre in Bucha and Putin's repeated nuclear intimidation (Horovitz and Stolze 2023).

In December 2022, the Japanese government completed the review of its National Security Strategy (NSS) for the first time in nearly a decade. The new National Defense Strategy and Defense Buildup Program, which were respectively renamed from the National Defense Program Guidelines (NDPG) and Medium Term Defense Program, were issued at the same time to ensure consistency between the documents. The review coincided with Russia's invasion of Ukraine, which must have had some influence on the review, but in fact, at the time the review was initiated, the dominant view was that the security environment surrounding Japan had become extremely severe. Thus, Russia's invasion probably reinforced the direction of the review, but not changed it.

This paper discusses how these major changes in the security environment have affected, or may affect, Japan's nuclear policy. First, after outlining Japan's traditional basic nuclear policy, the paper discusses the security environment in East Asia as perceived by the Japanese security community. Next, the paper will analyze how such changes in Japan's perceived security environment have affected, and may affect, Japan's nuclear policy, particularly from a national security perspective. The relationship between the "counterattack capability" that Japan has decided to possess under the new strategy and its nuclear policy will also be discussed. In summary, although there are no

[1]Prime Minister Eisaku Sato at the Budget Committee of the House of Representatives on December 11, 1967, first publicly declared the Three Non-Nuclear Principles of not possessing, not producing and not permitting the introduction of nuclear weapons into Japan. This policy was adopted in a resolution in the Plenary of the House of Representatives in 1971 and has long been officially reiterated as a "national policy" of Japan.

signs of a significant change in the official nuclear policy of the Japanese government, the reliance on nuclear weapons in Japan's security policy is expected to increase in the near- to mid-term, possibly causing friction with Japan's traditional nuclear disarmament policy.

Japan's Basic Security Policy and Non-Nuclear Policy

Japan's basic policy on nuclear weapons consists of four main pillars. The first pillar is that Japan will not possess nuclear weapons of its own. The Three Non-Nuclear Principles are part of this first pillar, upon which Japan joined the NPT as a non-nuclear weapon state. Second, since there are a large number of nuclear weapons in the world and Japan is exposed to nuclear threats, Japan's policy is to rely on the extended nuclear deterrence of the United States to deal with nuclear threats, the so-called "nuclear umbrella". Third, even if Japan depends on the nuclear umbrella in the short- and medium-term, its policy is to promote nuclear disarmament and non-proliferation to achieve a nuclear-weapon-free world in the long term. The fourth pillar is to promote the peaceful uses of nuclear energy.[2]

This four-pillared nuclear policy was pronounced before the NPT was opened for signature in July 1968 and has largely remained unchanged to the present day. These four pillars, especially the first three, were constructed as a result of the struggle between the opposite vectors of humanitarian and security concerns. First, the tragic experience of being the only country to have suffered atomic bombings of Hiroshima and Nagasaki has imprinted nuclear weapons in the minds of the Japanese people as inhumane weapons. As a result, although it was technically possible for Japan, which was in the process of reviving itself as a world-leading nation economically and technologically after the devastation of World War II, to possess nuclear weapons regarded as the hallmark of a leading nation, it denied possessing its own nuclear weapons and joined the NPT as a non-nuclear-weapon state, based on its Three Non-Nuclear Principles as a national policy. This was the result of the humanitarian vector at work. Second, however, as a member of the Western camp, Japan was exposed to nuclear threat from the Soviet Union and also faced nuclear threat from China (People's Republic of China), which conducted its first nuclear test in 1964 and was working to build a nuclear weapons system. In response to these nuclear threats, the government, whose mission is to ensure the security of its citizens, decided to rely on the extended nuclear deterrence of the United States, even if it did not possess its own nuclear weapons, because it could not afford to remain naked to nuclear threats. This is the result of the security vector at work. Third, simply relying on extended nuclear deterrence would only maintain the status quo in which nuclear weapons pose a threat. As the only nation to have suffered nuclear war, whose people longed for the abolition of nuclear weapons, Japan should not only respond passively but also actively strive to abolish nuclear weapons and, as a result, decided to promote nuclear disarmament and nonproliferation to achieve a world without nuclear weapons. This is the result of the humanitarian vector at work as well as that of the

[2]This basic nuclear policy of Japan that consists of these four pillars was pronounced by Prime Minister Sato at the Plenary session of the House of Representatives on January 30, 1968. *Shugiin Kaigi Roku Dai 3 gou (Minutes of the House of Representatives)*, January 30, 1968, p.37. See also Kusunoki (2008).

security vector, which is to foster a safer environment, as a world without nuclear weapons would be safer in the eyes of the majority of the Japanese public.

In light of the above, the basic approach of Japan's nuclear disarmament and nonproliferation policy has consistently been to move in stages towards the goal of a world without nuclear weapons, in a manner that does not negate or impede nuclear deterrence. Specifically, while ensuring non-proliferation by not increasing the number of nuclear-weapon states beyond the current level through measures such as strengthening export controls and International Atomic Energy Agency safeguards, the number of nuclear weapons in the possession of nuclear-weapon states should be reduced in a way that promotes international stability through measures such as the New Strategic Arms Reduction Treaty between the United States and Russia (New START). At the same time, nuclear testing should be banned through the Partial Test Ban Treaty (PTBT) and the Comprehensive Test Ban Treaty (CTBT), and the production of fissile material for nuclear weapons purposes should also be prohibited through early negotiations of a cut-off treaty (an FMCT) (Ministry of Foreign Affairs of Japan 2011). When "we reach the 'minimization' point where weapon numbers are reduced to very low numbers and when an internationally reliable verification regime with effective verification techniques and methods is established", "it will be necessary to give further thought, with a longer-term perspective, to how a non-discriminatory and internationally verifiable nuclear disarmament such as a multilateral nuclear weapons convention or a plurilateral arrangement among those with nuclear weapons would look like as the final building block" (Australia, Belgium, Bulgaria, Canada, Estonia, Finland, Germany, Hungary, Italy, Japan, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia and Spain 2016).

Japan is reluctant or opposed to any policy that could negate or impede nuclear deterrence because it would harm Japan's security. For example, Japan is not actively involved in the idea of a nuclear non-use treaty or the no first use (NFU) policy, which is intended to have the effect of first reducing the role and significance of nuclear weapons and then to lead to nuclear disarmament, as such policies would negate or impede nuclear deterrence. According to nuclear deterrence theory, the use of nuclear weapons is assumed for effective functioning of nuclear deterrence; hence, there would be certain conditions where nuclear deterrence will not function or will be reduced if nuclear weapons cannot be used under such policies. Furthermore, regarding the NFU (or "sole purpose"), Japan is lethargic for it denies nuclear deterrence against non-nuclear threats, for example, other types of weapons of mass destruction such as biological and chemical weapons and large-scale conventional threats that Japan believes may not be deterred by conventional weapons and require nuclear deterrence as a final guarantor. Japan believes nuclear deterrence should function against those non-nuclear threats at least for as long as such threats exist against Japan.[3]

[3]The Japanese government's official explanation for not being in favor of the NFU policy used to refer to the need for nuclear deterrence against non-nuclear threats (for example, then Foreign Minister Masahiko Komura's statement at the Committee on Foreign Affairs of the House of Representatives on 6 August, 1999; then Foreign Minister Hirofumi Nakasone's statement at the Committee on Foreign Affairs and Defense of the House of Councilors on 2 July, 2009). Such a reference has recently been omitted from the official explanation, however, and only the unverifiability of intent in general terms is referred to (for example, Prime Minister Fumio Kishida's statement at the Committee on Financial Affairs of the House of Representatives on 12 December, 2021; then Prime Minister Yoshihide Suga's statement at the Plenary of the House of Councilors on 12 April, 2021). For a debate in Japan on the NFU policy and "sole purpose", also see Akiyama (2021).

Changing Security Environment in East Asia from Japan's Perspective

The most important point about the security environment in which Japan finds itself is the fact that it is surrounded by three nuclear-armed states (China, North Korea, and Russia) that seek or are willing to attempt to change the status quo by force, which makes the security environment Japan faces unique and one of the most severe in the world. China has been unilaterally changing the status quo and making a fait accompli by force in the South China Sea and East China Sea, and it has not ruled out the possibility of annexing Taiwan by force, which it considers part of China, and has intensified this threat in recent years. North Korea has not abandoned its goal of reunifying the Korean Peninsula by force and is in a hurry to significantly strengthen its nuclear capability, especially to operationalize its tactical nuclear weapons. Russia is now in the midst of actually changing the status quo by force, as evidenced by its annexation of Crimea in 2014 and its invasion of Ukraine in 2022.

With regard to China and North Korea in particular, the former claiming territorial rights to the Senkaku Islands, which Japan now effectively controls, and the latter sometimes openly making nuclear blackmail against Japan, the possibility that Japanese territory would also become a target of attack in a military clash in the region is very high, and there is a heightened sense of crisis within Japan.

China

As Commander Davidson of the US Indo-Pacific Command testified at a US Senate Armed Services Committee hearing in March 2021 that China could annex Taiwan within the next six years (Suliman 2021), China is becoming more assertive on Taiwan. At the Communist Party Congress in October 2022, President Xi Jinping stated, China "will continue to strive for peaceful reunification of Taiwan" but added that it "will never promise to renounce the use of force (Yew and Blanchard 2022)". This was the first time that the use of force was mentioned in the context of Taiwan at a Communist Party congress.

During the visit of US House Speaker Pelosi to Taiwan, China made large-scale military threats against Taiwan, including the launch of a number of ballistic missiles over Taiwan. Five of the nine ballistic missiles fired by China fell in Japan's exclusive economic zone (EEZ) (Johnson 2022b), making it clear to many Japanese that Japanese territory could be the target of an attack in the event of a crisis over Taiwan. It is concerned that China may turn a Taiwan contingency into a compound situation with the Senkaku Islands to drive a wedge in to the alliance and to deter Japan from providing rear support to the US forces. In annexing Taiwan, China will certainly seek to deter military intervention by the United States and Japan, especially the US military, through anti-access and anti-denial (A2/AD) capabilities, and even if it does not go so far as to actually detonate nuclear weapons, it is likely to try to achieve this goal by projecting a nuclear shadow in some form. Many of the intermediate-range ballistic missiles that China possesses in large numbers and that have a range over Japan are dual-use missiles capable of carrying both nuclear and conventional warheads. It is

not inconceivable that it launches a dual-use intermediate-range ballistic missile equipped with a conventional warhead into Japanese territory, thereby projecting a nuclear shadow.[4]

North Korea

North Korea aims to deter military intervention by the United States and, if deterrence fails, to win an all-out or limited war with the United States. Accordingly, North Korea is developing intercontinental ballistic missiles (ICBMs) with the US mainland within its range, as well as striving to develop tactical and theater nuclear weapons capable of limited nuclear use. In fact, Kim Jong-un has set the goal of further development and deployment of "tactical" nuclear weapons in his five-year plan announced at the 8th Party Congress of the Workers' Party of Korea in January 2021, and the new law that was passed in September 2022 significantly expanded the role of nuclear weapons to include "achieving decisive victory" beyond deterrence (KCNA 2022). The series of ballistic missile launches during the last half of 2022 were aimed at training for a tactical nuclear force (O'Carroll 2022). North Korea's "tactical nuclear weapons" are not limited to victory on the battlefield, but, as in the case of China mentioned above, it includes projecting a nuclear shadow, for example, to deter Japan's logistical support.

Russia's Nuclear Strategy and Changing Nuclear Strategies of China and North Korea

Furthermore, Russia's nuclear threats in its invasion of Ukraine, or its possible use of nuclear weapons in the conflict, would have a major impact on the security of Northeast Asia. There is a view that Russia may use nuclear weapons on a limited basis based on the "escalate to de-escalate" doctrine to prevent/deter Western military intervention in Ukraine and/or to make the West back down from its support for Ukraine economically and through the provision of weapons.

China and North Korea may be following suit and adopting a similar doctrine as Russia's "escalate to de-escalate" doctrine. China is rapidly pushing forward with its nuclear force buildup in a non-transparent manner, and its nuclear doctrine may be transforming along with it. Traditionally, China's modernization of its nuclear forces has been seen as simply increasing survivability and basically only to ensure a -survivable second-strike capability, but recent developments have further solidified suspicions that it may be going beyond that. In fact, China's nuclear capability, which it had previously referred to as "lean and effective", was changed to "advanced and high-level strategic deterrent" in 2021 and to a "powerful, strong nuclear deterrent capability system" at the party congress in 2022, effectively confirming the recent buildup of its nuclear capability (Wang 2022).[5] With regard to North Korea as well, the main objective has traditionally been to ensure strategic deterrence against the United States, but

[4]For example, see the report of the tabletop exercise by the Japan Forum for Strategic Studies in August 2022 for the Japanese security community's view on the possibility of a "compound situation" and China's nuclear blackmail (Japan Forum for Strategic Studies 2022).

[5]Also see Japan Forum for Strategic Studies (2022) where China's escalate to de-escalate nuclear blackmail is part of the three major scenarios.

recently North Korea has been concentrating its resources on the development and operational training of "tactical" nuclear weapons, as stated above, indicating a major shift in North Korea's nuclear doctrine away from mere deterrence (Mount 2022).

Implications to Japan's Nuclear Policies

Immediate Implications to Japan's Nuclear Policies

Japan's basic national security and defense strategy has been inherited from the Cold War era and has not changed significantly to date. The cornerstone of Japan's national security policy is to create a stable and predictable international environment through diplomacy and to prevent the emergence of threats before they occur. At the same time, through the development of appropriate defense capabilities to protect the lives and property of its citizens and Japan's territory, territorial waters, and airspace, and through strengthening its alliance with the United States, with which it shares fundamental values and interests, Japan seeks to prevent the occurrence and escalation of aggression, and if aggression does occur, to strengthen its deterrence and response capabilities to counter and eliminate aggression. Against the threat of nuclear weapons, extended deterrence by the United States with nuclear deterrence at its core, is essential, and Japan will work closely with the United States to maintain and strengthen the credibility of the extended deterrence, while responding appropriately through its own efforts. This strategy has been more or less consistent throughout Japan's basic national security and defense strategies (Cabinet Secretariat 2013; Cabinet Secretariat 2022a; Cabinet Secretariat 2022b; Ministry of Defense of Japan 2018) .

The security environment around Japan is becoming increasingly severe year by year, however, and the 2022 National Security Strategy of Japan states that "Japan's security environment is as severe and complex as it has ever been since the end of World War II (Cabinet Secretariat 2022b, 2)". During the Cold War, the world was under the general fear of an all-out nuclear war between the United States and the Soviet Union, but basically the front line was in Europe, and for Japan in the Far East (with the exception of a possible Soviet invasion of Hokkaido), the threat was in a sense an abstract one. Today, however, the aggressive behavior of China over the past decade and the growing nuclear risk surrounding North Korea, as well as Russia's invasion of Ukraine since February 2022, have made the threat seem more real, as described in the previous section. Under these circumstances, the euphoria that prevailed immediately after the collapse of the Cold War has disappeared, and there is a general growing awareness of the need to strengthen nuclear deterrence rather than nuclear disarmament.

Nevertheless, there has been no apparent change in the government's official nuclear policy at this time, nor is there any indication of such a change. There is no indication that any of the four basic pillars of Japan's nuclear policy will be changed. Even if North Korea possesses nuclear weapons and is significantly increasing its nuclear capabilities, there is no indication at this time that Japan will change its nuclear policy by moving away from extended US nuclear deterrent to acquiring its own nuclear weapons as has often been predicted in the past. As mentioned earlier, the government also quickly denied the idea of "nuclear sharing", a discussion initiated after Russia's invasion of Ukraine, triggered by former Prime Minister Abe. Nor is there any sign that the

government will halt or slow down its promotion of nuclear disarmament and nonproliferation. Rather, Prime Minister Kishida, a prime minister elected from Hiroshima, has been enthusiastic about nuclear disarmament and was the first Japanese prime minister in history to attend the NPT Review Conference in August 2022 (Ministry of Foreign Affairs of Japan 2022a). At this Review Conference, he announced the establishment of a new "International Group of Eminent Persons for a World without Nuclear Weapons" to tackle head-on the difficult issues of relationship between nuclear disarmament and nuclear deterrence.[6] Prime Minister Kishida also held the G7 summit meeting in Hiroshima in May 2023, where he succeeded in having all G7 leaders visit the Hiroshima Atomic Bomb Museum (Peace Memorial Museum) and in issuing "G7 Leaders' Hiroshima Vision on Nuclear Disarmament" (Ministry of Foreign Affairs of Japan 2023). It was the first time the G7 agreed to a document focused on nuclear disarmament at the summit level.

On the other hand, it is not that the worsening security environment around Japan has had no impact. Extended nuclear deterrence provided by the United States is becoming increasingly important to Japan, and while denying nuclear sharing, "Japan will further strengthen the deterrence and response capabilities of the Japan-US Alliance, including extended deterrence by the United States that is backed by its full range of capabilities, including nuclear (Cabinet Secretariat 2022b, 22)". 2022 National Defense Strategy states that "in order to ensure U.S. extended deterrence with nuclear deterrence at its core remains credible and resilient, Japan will further actively engage in and deepen bilateral discussions on extended deterrence including those at the ministerial level (Cabinet Secretariat 2022a, 19)". While this statement is not totally clear, it may be contemplating upgrading the Japan-US extended deterrence dialogue (EDD) from the current working level to the ministerial level. The US 2022 Nuclear Posture Review (NPR) also calls for stronger extended deterrence consultation, including the possibility of "periodically meeting at higher levels of seniority (US Department of Defense 2022a, 15)". At the same time, it should be noted that strengthening extended deterrence by the United States itself is not a change of Japan's basic security policy, but it could have the effect of preventing its change from relying on US extended deterrence to going nuclear on its own.

Moreover, as extended nuclear deterrence becomes increasingly important, it is more difficult for Japan to pursue policies that could impede extended nuclear deterrence, i.e. more progressive nuclear disarmament policies. For example, declaratory policies such as the NFU policy and the "sole purpose" policy of limiting the purpose of nuclear weapons to deterring the use of nuclear weapons by an adversary, which Japan rejected even in the post-Cold War period when nuclear disarmament most progressed, are now more unlikely. NFU and the "sole purpose" policy have long been difficult for Japan to adopt in a situation where the possibility that China or North Korea may possess non-nuclear weapons of mass destruction such as biological or chemical weapons has not been ruled out, nor has the possibility of invasion by conventional forces. As the direct security threat to Japan increases as described above, however, the dominant view among the Japanese security circle is that Japan should more than ever retain the means to deter any

[6]The first meeting of the Group was held in Hiroshima on December 10–11, 2022 (The Ministry of Foreign Affairs of Japan 2022b).

aggression against it and should not issue a message that could diminish its deterrence in any way, such as by adopting NFU or the "sole purpose" policy. This view of the need for retaining the first use option in East Asia was rather abstract in the past, but it is becoming a more concrete necessity with Russia's invasion of Ukraine. If Russia's aggression in Ukraine intensifies further and the United States is compelled to concentrate its conventional forces in Europe, and if China were to invade Taiwan taking advantage of such a situation, there would be a shortage of conventional forces that the United States could allocate to East Asia. In such a case, the United States would have no choice but to take a more forward leaning stance on the option of a first nuclear use (SPFN 2022, 25:48–31:05). Thus, the adoption of the NFU or "sole purpose" is increasingly difficult.

The same is true of the way in which the Treaty on the Prohibition of Nuclear Weapons (TPNW) is addressed. From the perspective of Japan's four-pillar nuclear policies, it is no different than before that Japan cannot join the TPNW, which denies nuclear deterrence, but whether or not to participate TPNW's meetings as an observer, which is technically possible even under the current security framework, is a policy judgement. The reason for Japan's decision not to join the TPNW even as an observer was due to the belief that it would send a wrong message to both its adversaries and its ally (the United States) that Japan is weakening its approach to nuclear deterrence (Author's interview with Japanese government officials on July 15 and 21 July 2022). As far as not attending as an observer is a policy judgement, a non-LDP administration might have made a different policy decision under the same security environment. Conversely, the same LDP administration might have been able to participate as an observer, especially depending on Japan's security environment.

Possible Longer-Term Implications of Japan's Nuclear Policy

At this point, the immediate implications for official Japanese government policy are limited to "making it harder to adopt more progressive policies", as mentioned above, but based on discussions among Japanese security experts, Japan may lean toward relying more on nuclear weapons in its national security strategy while still retaining the four-pillar nuclear policies described above. For example, it is argued that, given the situation where the United States has lost conventional force superiority over China while the US defense investment is projected to relatively decline rather than increase, "the U.S. may be forced to supplement its lost conventional superiority by expanding the role of its nuclear forces" (Murano 2022c, 51; Murano, Andrew, and Krepinevich 2022).

Such an expanded role for nuclear forces may proceed, especially in the nuclear operational aspect along with integration of US and Japanese forces. For example, Sugio Takahashi of Japanese National Institute for Defense Studies (NIDS) points out the fact that "Japanese forces would be involved on a 'need to know' basis in *operational planning* for the use of shared nuclear weapons" (emphasis added) as a reason why nuclear sharing with the United States "would strengthen the alliance" and thus "contribute to general deterrence", in addition to it having the "significant symbolic effects, both domestically and externally". By "involving Japanese forces in operational planning", it is suggested that nuclear sharing would also constitute "the best form of reassurance for Japan's defense (Tanida 2022)".

It is further argued that in a potential military conflict over the Taiwan Strait, the nuclear option cannot be ruled out to fill the US-China missile lethality gap. The US-Japan side's strike capability against Chinese hardened targets is currently confined to a limited number of US cruise missiles with no ballistic missiles deployed in the region while the destructive power of cruise missiles against hardened targets is limited. In contrast, China has deployed a large number of ballistic missiles, which have high destructive power against hardened targets, and can thus destroy hardened targets of Japan, the United States, and Taiwan. The argument goes that to close the missile lethality gap between the United States and China, the nuclear option cannot be ruled out (SPFN 2022, 41:53–44:10).

On this matter, two concrete nuclear options to fill such a gap are provided. One is the deployment of dual-capable aircraft (DCA). Another preferable option is either sea-launched nuclear cruised missiles (SLCM-N) or frequent visits of ballistic missile submarines (SSBNs) with low-yield warheads, which is more survivable to an adversary's first strike and with more host nation's acceptability compared to the first option (SPFN 2022, 47:05–49:30).[7] The latter option is favored due to its vulnerability and its associated risks to crisis stability (Murano 2022c, 51–53).

In case the latter option of frequents visits of SSBNs involves actual port visits to Japan, Japan would have to change its three Non-Nuclear Principles to so-called 2.5 Non-Nuclear Principles to allow such visits even during peacetime. As to a crisis situation, the Japanese government, effectively turning the Three Non-Nuclear Principles to 2.5 Principles in an emergency, has kept an option open to allow a temporal port call by a nuclear-armed vessel since 2010 when the government investigated the so-called secret agreement with the United States over the possibility of a port call by a nuclear-armed vessel.[8] The subsequent administrations have officially adopted and succeeded this interpretation of the Three Non-Nuclear Principles since then. The question may arise whether this virtual 2.5 Non-Nuclear Principles be made permanent, including during the peacetime.

It is asserted that low-yield nuclear weapons would be needed for engaging extended area targets as neither the United States nor Japan possess such capabilities with conventional cluster munitions on ballistic missiles, with Japan being a state party to the Cluster Munitions Convention (SPFN 2022, 51:00–53:10; Murano 2022c, 52).[9]

The issue of command and control integration of both the United States and Japan has also been raised, pointing out that neither the United States nor Japan is ready for a theater nuclear war that could be triggered by a Taiwan crisis. As previously pointed out, in the event of a military conflict across the Taiwan Strait, the Indo-Pacific Command would deal with the situation, but the Indo-Pacific Command does not have nuclear weapons. On the other hand, the Strategic Command, which commands

[7]For a counterargument that SLCM-N is not necessarily required for Japan's security, see Nishida (2022).

[8]Foreign Minister Okada at the Foreign Affairs Committee of the House of Representatives on March 17, 2010 stated that "If an emergency situation arises and Japan's security cannot be ensured without allowing a temporal port call by a nuclear-armed vessel, the administration of the day will make a decision on the fate of the administration and explain the situation to the people of Japan". (author's translation) *Gaimu Iinkai Kaigi Roku Dai 5 gou (Minutes of the Foreign Affairs Committee of the House of the Representatives)*, March 17, 2010, 12–13. As to the so-called secret nuclear agreements with the United States, see Okadome (2010).

[9]Murano recently advocates for developing intermediate-range nuclear prompt strike (IR-NPS) on board nuclear - powered attack submarines (SSN) to fill the gap in the Indo-Pacific region's lack of theater nuclear forces if the development of SLCM-N takes time due to the US domestic politics (Murano 2023).

US nuclear forces, is not prepared for a regional contingency. A significant challenge now is how the United States will integrate command and control of conventional and nuclear forces and how Japan will be integrated into the U.S. integration of command and control (SPFN 2022, 44:10–45:10).

In this vein, a similar argument has been made for the need to improve the integration of nuclear and conventional combined operational planning processes by linking the agenda of the Extended Deterrence Dialogue with the joint operational planning process through the US-Japan Bilateral Planning Committee. This "would seamlessly construct an escalation ladder from the gray-zone to more specific nuclear options in the defense of Japan". It is suggested that there be "US-Japan joint exercises that include not only US Indo-Pacific Command, but also US Strategic Command (Murano 2022c, 52–53)".

Japanese support for further integration with the US command and control and for "complementary capabilities" as called for in the 2018 US NPR such as low-yield nuclear weapons and new nuclear-armed sea-launched cruise missiles (SLCM-N) may place Japan in a weak position in the global nuclear disarmament movement. But these are more of nuclear operational issues, and in relation to the traditional nuclear disarmament policy, except for the potential "slight" adjustment of the three Non-Nuclear Principles, they fall into the category of making it more difficult to adopt a progressive policy.

Japanese experts are now arguing, however, that the United States should increase its nuclear capability in line with China's nuclear buildup. For example, it is argued that if China increases its nuclear capability to 1,500 nuclear weapons by 2035 as estimated by the latest US Defense Department's annual report on China's military power (US Department of Defense 2022b, 97–98), and if the US nuclear capability remains at the current level, its allies will be nervous about the ability of the United States to fight a nuclear war. Therefore, the United States needs to start thinking about increasing the number of deployed nuclear weapons to confront two strategic competitors simultaneously (SPFN 2022, 1:10:10–1:12:00; Murano 2022a).

It is unlikely that these arguments will be easily reflected in Japan's foreign policy, given that a strong anti-nuclear sentiment remains alive and well in Japan even in a severer security environment, and nuclear disarmament still enjoys strong support among the Japanese public. According to a public opinion poll conducted by the Cabinet Office on the role Japan should actively play in the international community, disarmament and non-proliferation is the third most supported of the 10 categories, with approximately 45% support both before and after the invasion of Ukraine, following (1) the resolution of global issues such as the environment, global warming, and infectious diseases, and (2) efforts toward the peaceful resolution of conflicts (Cabinet Office 2021, 2022). Having said that, were the Japanese government to adopt into its policy the argument put forward by Japanese security experts mentioned above, it would clash directly with Japan's nuclear disarmament policy, which calls for a gradual global reduction of nuclear weapons.

Another issue that could conflict head-on with Japan's nuclear disarmament policy includes nuclear testing. Although there is no indication of any debate among Japanese security experts on this point yet, were a future administration to resume a nuclear test, Japan would be placed in a difficult position. The Trump administration was reportedly seriously considering resuming nuclear testing in 2019 from the political perspective of demonstrating US counter-measures against

China and Russia (Hudson and Sonne 2020), even though US national laboratories had certified for more than 25 years that from a scientific perspective, resumption of nuclear testing was unnecessary to maintain US nuclear deterrence. A potential nuclear testing from such a political motivation, rather than from a scientific necessity, would put Japan in a difficult position to squarely deny the critical decision taken by the United States that provides extended nuclear deterrence. Japan would find itself in an even more precarious situation to come to terms with domestic anti-nuclear sentiment were the United States to argue that the nuclear test will enhance the credibility of extended nuclear deterrence. This would be extremely damaging to Japan's nuclear disarmament policy that has placed a strong emphasis on the early entry into force of the CTBT. In addition, although US national laboratories have certified that resumption of nuclear testing is scientifically unnecessary, there is no guarantee that this will continue indefinitely. If, in the future, US national laboratories recognize that, with scientific evidence available to them, the maintenance of US nuclear deterrence, including extended nuclear deterrence, cannot be guaranteed without resumption of nuclear testing, logically speaking, Japan would require US nuclear testing to resume for its own national security despite its strong domestic anti-nuclear sentiment.

Furthermore, the aforementioned reasons for the possibility of first use options and the necessity of low-yield nuclear weapons are not merely for deterrence, but they are more specific arguments for battlefield use. This would run counter to the statement that a nuclear war cannot be won and must never be fought, first issued by Presidents Raegan and Gorbachev in 1985 and most recently reiterated by the leaders of five nuclear-weapon states in January 2022. This statement effectively denies a nuclear warfighting strategy and limits the role of nuclear weapons to deterrence. Japan's adoption of the aforementioned arguments for the need of low-yield nuclear options would logically make it difficult for Japan to support such a statement. Based on the traditional US view of nuclear deterrence, which holds that the enhancement of deterrence requires not only the mere retention of capabilities but also an actual plan for their use, it is not impossible to continue to contend that such arguments for battlefield use are also for the enhancement of deterrence. However, if one emphasizes the positioning of low-yield nuclear weapons to fill the gap in the ability of conventional weapons to strike Chinese and North Korean hardened and extended area targets, this would certainly lower the threshold for nuclear use, as it would bring it closer to the nuclear mission aspect of battlefield or theater operations rather than the strategic nuclear deterrence aspect. In this regard, this kind of low-yield nuclear options is essentially different from those presented in the 2018 NPR. The Trump administration at the time explained that the low-yield nuclear weapons were intended only to avoid misleading Russia about US intentions and to deter Russia from using their low-yield nuclear weapons based on their escalate-to-de-escalate doctrine (US Department of Defense 2020).

Although Japan's nuclear policy consists of four basic pillars, they are not parallel. Since the government's primary mission is to ensure its national security, as long as certain nuclear disarmament is seen as impeding its own security and Japan-U.S. security cooperation is seen as improving its own security, strengthening Japan-U.S. cooperation will take precedence over nuclear disarmament, and the

nuclear disarmament policy may to some extent have to step back despite Japan's anti-nuclear sentiment.

Japan's Counterstrike Capabilities

Japan's security strategy outside of nuclear weapons has been changing significantly over the past decade or so. In 2007, the Defense Agency was upgraded to the Ministry of Defense, and, in 2013, the National Security Council was established as the command post for diplomacy and national security. In 2014, the interpretation of the Constitution was changed to allow Japan to exercise the right to collective self-defense, albeit on a limited basis, and the Peace and Security Law was enacted next year as the basis for this change. These are all efforts to bring defense and security policies, which have been strongly restrained since the end of World War II, closer to those recognized by any nation under the UN Charter, based on the recognition that the security environment around Japan has been fundamentally transformed and deteriorated. This is the so-called "normalization" of Japan, a process that removes self-imposed constraints on its right to the use of military force since its defeat in World War II beyond those imposed on ordinary UN member states under the UN Charter, and it brings it closer to the right to the use of military force recognized by ordinary UN member states.[10]

On the other hand, even with the above measures, Japan's defense and security policy remains more restrained than the right of self-defense recognized for "normal countries" under the UN Charter. For example, Japan continues to adhere to a passive defense strategy of "exclusively defense-oriented policy", as reiterated in the recent National Security Strategy and National Defense Strategy (Cabinet Secretariat 2022b, 5; 2022b, 19), in which "defense force is used only in the event of an attack", "the extent of the use of defensive force is kept to the minimum necessary for self-defense", and "the defense capabilities to be possessed and maintained by Japan are limited to the minimum necessary for self-defense (Ministry of Defense of Japan 2022, 213)". The newly allowed right of collective self-defense is also more limited than the right of collective self-defense granted to "normal" UN member states as it is restrictively interpreted to be permitted under the Constitution when three conditions are met (Ministry of Defense of Japan 2022, 192).[11]

Having said that, the focus of the recent debate has been whether Japan should have a "counterattack capability", or originally called "enemy base strike capability", a euphemism for strike capability against missile launch bases and other locations in enemy's territory, which Japan has eschewed as a matter of policy since its defeat in World War II. Needless to say, this does not mean nuclear weapons, but only conventional weapons. The original discussion began with the idea that, in response to North Korea's repeated ballistic missile launches and the development of ballistic missile technology and offensive capabilities that could now defeat Japan's missile defense

[10]For whether Japan is re-emerging as a great military power or as a "normal" military power in regional and global security affairs, see Huges (2013).

[11]The current three conditions for the use of force interpreted to be permitted under the Constitution are as follows: (1) When an armed attack against Japan has occurred, or when an armed attack against a foreign country that is in a close relationship with Japan occurs and as a result threatens Japan's survival and poses a clear danger to fundamentally overturn people's right to life, liberty, and pursuit of happiness; (2) When there is no appropriate means available to repel the attack and ensure Japan's survival and protect its people; (3) Use of force to the minimum extent necessary.

capabilities, Japan's security should not depend solely on missile defense, but should possess the ability to strike North Korea's ballistic missile bases once North Korea begins to launch ballistic missiles. The debate has been particularly active since the abandonment of the Aegis Ashore deployment in June 2020 due to local and domestic issues (Hornung 2020).

Since it was originally envisioned to strike North Korean ballistic missile bases, the specific capability is a medium-range strike capability, which could have been covered by the INF Treaty that expired in 2019 (but, again, only with conventional warheads, not nuclear warheads). North Korea's ballistic missiles are shifting from liquid-fuel missiles, which take longer to launch, to solid-fuel missiles, which are easier to conceal and have a shorter launch time. Under such circumstances, it is debatable as a defense policy issue how meaningful such counterattack capabilities could be as a response to North Korea's ballistic missiles. However, such capabilities are clearly not prohibited under international law (in fact, Japan is the only country in the region without such capabilities to begin with), and it is possible to use such capabilities if it adheres to the principles of the "necessity" and "proportionality" enshrined in international law. In addition, unlike the change of interpretation of the Constitution to allow limited collective self-defense as described above, counterattack capabilities have always been officially regarded as being within the realm of the exclusively defense-oriented policy since the policy does not mean Japan must sit and wait until it is physically attacked even when the enemy is clearly launching an attack on it (Ministry of Defense of Japan 2022, 234). Nevertheless, given that Japan's policy has been to not have such capabilities in the context of the shield and spear alliance relationship, it would certainly be a major shift in terms of military capabilities rather than a legal standpoint if such capabilities were to be possessed.

As mentioned above, North Korea's ballistic missile capabilities are becoming more rapid and survivable, making it nearly impossible to strike the source of their attacks. Thus, it would be almost impossible to directly strike North Korea's mobile missiles before they are launched as originally envisioned, in particular for Japan, which currently does not have early warning and tracking capabilities. Instead, Japan's counterstrike capability could reduce the operational functions of North Korea's missile forces by repeatedly striking North Korea's fixed ground targets related to its ballistic missile forces (Jimbo 2022b). In relations with China, which has a large gap with Japan and the United States in terms of medium-range strike capability, this counterattack capability could have more military utility. China aims to prevent Japan and the United States from intervening in Taiwan contingencies through its A2/AD policy and has a large number of ground-based medium-range strike capabilities. In response to such contingencies, Japan, which has no long-range strike capability due to its strict implementation of defense policy (stricter than its official interpretation of the exclusively defense-oriented policy), and the United States, which has for years limited air-launched and sea-launched intermediate-range strike capability due to the INF Treaty, would currently face a difficult response in the event of a Taiwan contingency. Under these circumstances, future intermediate-range strike capabilities, in particular ground-based ones of both the United States and Japan, could "effectively prevent Chinese naval vessels from approaching" and inflict damage to Chinese offensive air capability by attacking Chinese airbases including runways, thus making the operation to invade Taiwan more complicated for China (Iwama and Murano 2022; Murano 2022c, 50–51).

The development of such long-range strike capabilities for conventional weapons would fill the gap with China's strike capability and, as paradoxically as it may seem, could subdue the above discussion of the need for low-yield nuclear weapons to fill the conventional strike capability gap. As long as there is a possibility that China and North Korea may follow suit the Russia's escalate-to-de-escalate type of doctrine, the argument about the need for low-yield nuclear weapons to deter them will continue, but it will still be more about deterrence and less about nuclear missions in battlefield or theater use. This would lean more toward the deterrence side and raise the threshold of risk for nuclear use.

Conclusion

Japan's security policy has been transformed in response to the fundamentally changing regional security environment but, still, no significant changes in its official nuclear policy have been recognized. However, Japan may lean toward relying more on the role of nuclear weapons in regional contingencies with increasing emphasis on the nuclear operational aspect in the integration process, particularly unless and until it completes deploying its counterattack capabilities. During that time, this may conflict with Japan's traditional nuclear disarmament policy. Strictly from the perspective of maintaining Japan's standing in nuclear disarmament as the only country to have experienced nuclear bombings during a war, logically speaking, it is necessary, albeit controversial and seemingly paradoxical, for Japan to develop a counterattack capability for conventional weapons to fill the current strike capability gap so that the argument that the gap be filled with low-yield nuclear weapons will be no longer valid.

Developing such a capability must happen in a balanced manner, however, so that it would not create a significant security dilemma nor increase the risk of military conflict in the region, in which case the possibility of escalation to the risk of nuclear weapons use cannot be ruled out. For example, as something that can be done in the short term, Japan and the United States can consider declaring at a high level that their intermediate-range missiles (which would have been subject to the INF Treaty which expired in 2018) are not equipped with nuclear weapons and then propose a moratorium or eventual prohibition of equipping INF-category intermediate-range missiles with nuclear weapons in the Northeast Asian region as a measure to reduce the risk of escalation to nuclear use. It is unlikely that China and North Korea, which already have such nuclear intermediate-range missiles, will readily accept this proposal, but it can be a good starting point to invite regional countries and leverage the insights accumulated by the International Partnership for Nuclear Disarmament Verification (IPNDV)[12] to demonstrate that INF-type intermediate-range missiles are not nuclear armed. If government officials find it difficult to accept such an invitation, it can start with experts. Even in the tense US-Soviet relationship in the 1980s, both countries' scientists came together to jointly demonstrate the presence or absence of nuclear weapons on sea-launched cruise missiles (SLCMs) to facilitate the stalled Strategic Arms Reduction Talks (START) (Fetter et al. 1990; von Hippel 1989).

[12]For information about IPNDV, see https://www.ipndv.org/.

For China as well, confirming that Japan's and South Korea's intermediate-range missiles, referred to as counterstrike capabilities in Japan, are not loaded with nuclear weapons should be in their interest. For Japan, the United States, and South Korea, there is a need to develop arrangements for applying existing verification technologies without leaking military secrets, but with political will, it should be achievable. Furthermore, there is basically nothing to lose for the three countries that do not currently have plans to develop INF-type nuclear-armed intermediate missiles. Rather, by expanding the quality of the alliance relationship currently focused on enhancing deterrence capabilities to the next stage for arms control, and by South Korea also cooperating, it can lead to the deepening of the trilateral alliance and cooperation relationship between Japan, the United States, and South Korea. Building on these measures, it could be beneficial to initiate discussions among regional experts to explore potential transparency and confidence-building measures regarding non-INF type intermediate-range missiles and missile defense.

Through these efforts, it can be expected that regional confidence-building, familiarization of China with arms control verification practices, and eventually some form of regional arms control arrangement will be achieved. If such a measure as a moratorium or prohibition on nuclear loading for intermediate-range missiles is realized, or even if it is not, through this regional process, we could reduce the risk of a potential security dilemma, especially the risk of escalation to nuclear use, as mentioned above, which may be caused by the development and possession of counterstrike capabilities.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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