

KATSUHISA Furukawa¹

Research Institute of Science and Technology for Society
Japan Science and Technology Agency

JAPAN'S POLICY AND VIEWS ON NUCLEAR WEAPON: A HISTORICAL PERSPECTIVE²

This article discusses the history of Japan's pursuit of its nuclear policy and views on nuclear weapons since the Second World War. It explains how Japan's strategic thinking on nuclear weapons changed in accordance with changing security environment over the past decades, and the details of Japan's past examinations of its nuclear option as well as Japan's efforts to sustain and strengthen credible deterrence and policy on nuclear nonproliferation, disarmament, and arms control. The article concludes that the likelihood for Japan to go nuclear seems extremely low as long as the current trend in the security environment may not experience significant transformation. Instead, Japan will continue to strengthen its alliance with the United States and overall deterrence posture while pursuing nuclear nonproliferation, disarmament, and arms control together with the international community, especially with the countries in East Asia. This article also argues that Japan's focus on nuclear option should not be seen as undermining the security and stability of Asia, but rather that it is a prerequisite, in a way, to foster healthy discussion over security policy in Japan, and to strengthen the Japan-U.S. alliance, to prepare for new security challenges in evolving strategic environment in this region.

Keywords: *Japan, nuclear weapons; Japan-U.S. alliance; nuclear deterrence; nuclear non-proliferation*

Introduction

The possibility of Japan's nuclear armament has been a subject of widespread international attention for many decades.³ Although there are other countries that have

¹ The views expressed here are those of the author and do not represent those of the Research Institute for Science and Technology for Society or its research sponsors.

² This article was produced by expanding and updating the author's another papers as below: "Making Sense of Japan's Nuclear Policy: Arms Control, Extended Deterrence, and the Nuclear Option," in Benjamin Self ed., *Japan's Nuclear Option: Security, Politics, and Policy in the 21st Century* (The Henry L. Stimson Center, Washington, D.C.: 2003), pp. 95-147; Hajime Izumi and Katsuhisa Furukawa, "Not Going Nuclear: Japan's Response to North Korea's Nuclear Test", *Arms Control Today*, June 2007; Michael J. Green and Katsuhisa Furukawa, "Japan: New Nuclear Realism", in Muthiah Alagappa. ed., *The Long Shadow: Nuclear Weapons and Security in the 21st Century*, Stanford University Press, California 2008; and Katsuhisa Furukawa, "Chapter 2: Conditions for Japan's Nuclear Option", in James Wortz ed., *WMD 2020* (Stanford University Press) (forthcoming).

³ In the realm of the weapons of mass destruction (WMD), the concern for Japan's nuclear armament has drawn significant international attention over the past decades. While Japan also possesses potential capability (both human resources and infrastructure) to produce some of the chemical and biological weapons (CBW), there barely existed any discussion about Japan's option to use these weapons, after the end of the Second World War. Japan has sustained a posture of

latent nuclear capabilities, the issue of Japan's nuclear future has almost always drawn the attention of the United States and Asian countries. Japan can hardly escape from these countries' concerns that Japan's interest in nuclear option might potentially invoke *tsunami*-effect among other Asian countries in their pursuit of nuclear weapons. Traditionally, Japan's response to such claims used to be rather emotional, resorting to the resurrection of painful memories from the calamitous nuclear bombings in Hiroshima and Nagasaki. Today, however, Japan's strategic culture has shifted from traditional pacifism to realism, as regional security environments have changed over the past years, and discussion on the hypothetical possibility of a nuclear option is certainly no longer a taboo. For a majority of Japanese, however, the scenario of a nuclear Japan is still regarded as far from reality, so much so that the Japanese regard foreign countries' concerns about Japan's nuclear future as exaggerated and a symbol of the others' lack of understanding of Japan.

This article discusses the history of Japan's pursuit of its nuclear policy and views on nuclear weapons since the Second World War. The first section analyzes Japan's nuclear policy and past examinations of its nuclear option until the end of the Cold War. The second section analyzes Japan's strategic thinking on nuclear weapons in a changing security environment after the early 1990s when Japan has come to face increasing threats of North Korea's WMD programs and uncertainty direction of Chinese military modernization. The final section examines Japan's efforts to sustain and strengthen credible deterrence and policy on nuclear nonproliferation, disarmament, and arms control for the future.

All in all, the likelihood for Japan to go nuclear seems extremely low as long as the current trend in the security environment may not experience significant transformation. Instead, Japan will continue to strengthen its alliance with the United States and overall deterrence posture while pursuing nuclear nonproliferation, disarmament, and arms control together with the international community, especially the countries in East Asia.

Japan's Nuclear Policy and Past Examinations of a Nuclear Option

Japan's Nuclear Policy

Throughout most of the Cold War, Japan's nuclear policy reflected two guiding pillars. The first was the so-called "Three Non-Nuclear Principles," which prohibit Japan from manufacturing, possessing, or permitting the entry of nuclear weapons into the air, land or sea controlled by Japan. The adoption of these Principles was announced by Japanese Prime Minister Eisaku Sato during the Diet session in December 1967. However, it is known that the U.S. military located nuclear weapons in Japan during the Cold War, despite these Principles.

The "Four Nuclear Policies", announced by Prime Minister Sato in 1968, is the second pillar. Japanese governments has pledged to (1) adhere to the Three Non-Nuclear Principles, (2) pursue global nuclear disarmament, (3) limit the use of nuclear energy to peaceful purposes as defined by the 1955 Atomic Energy Basic Law, and (4) rely upon U.S. extended deterrence that is codified by the 1960 Japan- U.S.

exclusive self-defense, and concentrated on developing conventional systems backed by US extended deterrence. Comparatively the CBW have been regarded as lacking reliability as a stable weapon, given that the capability of CBW can be significantly affected by natural condition, such as weather, temperature, or moisture level, in addition to all the conceivable problems that both conventional and nuclear weapons may generate.

Security Treaty. In keeping with these Four Nuclear Policies, Japan has embraced various international treaties and agreements. Above all anything else, Japan signed the Non-Proliferation Treaty (NPT) in 1970 and then joined for its indefinite extension in 1995. Japan's nuclear programs are also regulated by other international treaties and agreements, such as the International Atomic Energy Agency (IAEA) safeguards agreement, the IAEA Additional Protocol, the Nuclear Suppliers Group, and the London Guidelines on the exchange of chemical information. In addition, Japan has signed bilateral safeguards agreements with its major nuclear suppliers, including the United States, United Kingdom, France, Australia, and Canada. These agreements are intended to provide additional safeguards on transferred materials and technologies in the event that Japan should withdraw from the NPT. Various Japanese governments have chosen to deeply embed nuclear issues into a network of treaties, laws, and administrative regulations.

Despite these policies, Japan's nuclear option was speculated among foreign countries occasionally in the past, for example, in the aftermath of China's nuclear testing in the 1960s and at the time of the international negotiations over the Non-Proliferation Treaty both in the 1970s and in 1994-95 as well as during the North Korean nuclear crisis in 1993-94, and after the North Korean nuclear test in 2006 and 2009.⁴ Indeed, Japan's nuclear policy has been based on the precondition that Japan was protected by the U.S. nuclear umbrella. Thus far, Japan has ruled out its nuclear armament option. Because the United States is an independent actor, however, Japanese governments in the past have quietly re-examined the nuclear option at times of fundamental strategic shift in the international system.

Thinking about the Nuclear Option: 1940 - 1960

The 1940s

In the spring of 1940 during the Second World War, the Japanese Army initiated a research project on uranium enrichment technology using gas diffusion process, followed by another one by the Navy on gas centrifuge process in May 1943.⁵ As the war situation deteriorated in the summer of 1944, Japan began to devote more attention to developing a nuclear weapon, but its efforts were in vain. After the war, the U.S. government concluded that Japan only possessed a rudimentary nuclear weapons program, roughly equivalent to the state reached by the U.S. nuclear weapons program in early 1942.⁶ Nevertheless, Japanese scientists had determined the amount of uranium required for a bomb, calculated the likely yield of a fission device, and understood how they might go about triggering a fission reaction.⁷

⁴ See the following reference materials for a comprehensive overview of Japan's examination of nuclear option: Akira Kurosaki, *Kaku Heiki to Nichibeiki Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006); and Narushige Michishita, "Kaku Mondai ni kansuru Nihon no Ugoki (Japan's Actions regarding Nuclear Problems)," a briefing material produced as a course material of Michishita's class at the Graduate Research Institute of Policy Studies in Tokyo, Japan, August 2006.

⁵ Hiroki Sugita, *Kenshou Hikaku no Sentaku* (Reviewing Japan's Decision to Pursue Non-Nuclear Weapon State) (Iwanami Shoten, Tokyo: 2005), p. 13-17.

⁶ Sugita, *Kenshou Hikaku no Sentaku*, p. 19.

⁷ *Ibid.* pp. 19-20.

The 1950s

As the Cold War deepened in the 1950s, the U.S. military began to encourage Japan to prepare for nuclear warfare, to which Japan responded honestly. Tokyo's response was driven by increasing anxiety about potential nuclear attack from the Soviet Union and the possibility that China might test a nuclear weapon. At that time, Japanese military investigated nuclear option somewhat openly, including its tactical use. The 1950s were unique in the sense that statements about Japan's nuclear options appeared in the press relatively openly, reflecting Japan's increasing concern over the Soviet nuclear attack and U.S. encouragement to take the problem seriously.⁸ Japan's interest in nuclear weapon was a product of the U.S. Eisenhower administration's encouragement. Advice from French high-ranking political figures on the merit of nuclear weapon state also prompted Japanese policymakers to examine a nuclear option.

As the United States began to encourage Japan's remilitarization in the mid-1950s, Japan's Self-Defense Forces (SDF) initiated research on protection measures in the event of nuclear attack.⁹ In March 1955, Japanese Prime Minister Ichiro Hatoyama stated: "There is no reason to oppose to the (idea of) U.S. storage of nuclear weapons in Japan if (military) power contributes to the preservation of peace justifiably."¹⁰ He repeated a similar statement in July. Starting in 1956, the U.S. Army Command and General Staff College began to accept colonels from Japan's Ground SDF (GSDF) as overseas students. These officers were taught U.S. doctrine about nuclear operations.¹¹ In February 1957, Japan's defense minister confirmed in the Diet session that the government had initiated an assessment of the potential damage Japan might suffer in the event of nuclear attack. By the late 1950s, Japan also began to procure combat tanks and vessels that offered some protection (e.g., self-contained oxygen systems) and decontamination equipment in the battlefield of nuclear warfare.¹²

There also are indications that during the 1950s, the Japanese GSDF undertook studies on the use of nuclear weapons against Soviet Union.¹³ In May 1957, Japanese Prime Minister Shinsuke Kishi stated, "The Japanese Constitution does not rule out Japan's possession of nuclear weapons for self-defense."¹⁴ In November 1958, during a visit to the United States, Lieutenant General Kumao Imoto stated that Japan would fare better by possessing nuclear weapons against an enemy equipped with nuclear weapons.¹⁵ In May 1959, Japanese Defense Minister Hanjiro Inou, suggested that Japan might possess nuclear-armed missiles in the future.¹⁶ In July 1959 Munenori Akagi (who later became defense minister) revealed a draft of the second defense buildup program, which assumed deployment of missiles capable for both conventional and nuclear-warheads.¹⁷

However, these examinations over nuclear options were constrained by the public's allergy against nuclear weapons, which became profound when the members

⁸ Ibid. pp. 47-48.

⁹ Ibid. pp. 46-47.

¹⁰ Ibid. p. 47.

¹¹ Ibid. pp. 42-47.

¹² Sugita, *Kenshou Hikaku no Sentaku*, pp. 46-47.

¹³ Ibid.

¹⁴ Ibid. p. 47.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Ibid.

of a fishing ship, *Daigo Fukuryūmaru* (Lucky Dragon), were exposed to radiation during their operation near the U.S. nuclear testing site on Marshall Island March 1954. The Japanese public was appalled because this incident rekindled memories of the 1945 U.S. nuclear attacks on Japan.¹⁸

Despite such public sensitivity, in December 1954, the Eisenhower administration approved the transfer of non-nuclear components of nuclear arsenal to U.S. bases in Japan.¹⁹ Japan was to be used for nuclear operations against Soviet Union or China in the event of war.²⁰ During the late 1950s, the Pentagon hoped to cure the Japanese of their “nuclear allergy” so that they would accept ongoing nuclear weapon storage in Japan,²¹ although there were dissenting views to such an idea within the U.S. Department of State.²² Eventually, about 800 nuclear warheads were located at Kadena airbase by the end of the Eisenhower administration.²³ In August 1955, the United States also deployed MGR-1, or *Honest John*, the U.S. rocket system capable of carrying nuclear warheads, to U.S. military base in Asaka in Saitama Prefecture, close to Tokyo, although U.S. military, claimed that they were not equipped with nuclear warheads.²⁴

In addition, in January 1957, the U.S. media reported that the United States planned on deploying land units armed with tactical nuclear weapon to Japan. Martin E. Weinstein, who became a special advisor to the U.S. ambassador to Japan from 1975-1977, admitted that the Eisenhower administration had planned to introduce nuclear missiles to Japan as part of its New Look national security policy.²⁵ The Hatoyama government was concerned about public opposition to the deployments, and agreed only to introduce the rocket system without nuclear warheads.²⁶ Nuclear weapons were to be brought into Japan only if the global security situation deteriorated.

In April 1957, the U.S. Department of Defense (DOD) produced a report stating that there was a chance that the Japanese public's opposition to nuclear weapons might recede in the coming years and that they might accept nuclear weapons for defensive purpose if they became convinced a Japanese nuclear capability would bolster deterrence and stability in Asia.²⁷ In February 1959, another U.S. DOD report stated that Japan might approve U.S. nuclear operations against the People's Republic of China (PRC) from U.S. military bases in Japan if the Japanese government believed that Beijing might possibly use nuclear weapons against Japan.²⁸ In December 1957, Frank C. Nash, a special advisor to President Eisenhower recommended to the President that the U.S. military should train the SDF in the use of

¹⁸ Ibid. p. 53.

¹⁹ Robert S. Norris, William M. Arkin, and William Burr, “Where They Were”, *The Bulletin of the Atomic Scientists*, November/December 1999, p. 30.

²⁰ Peter Hayes et al., *American Lake, Nuclear Peril in the Pacific* (New York: Penguin Books, 1986), p. 76.

²¹ Norris, Arkin, and Burr, “Where They Were”, p. 31.

²² Shinichi Kitaoka, “Anzen Hoshou no Taibei Izon ga Umidashita ‘Mitsuyaku’ no Jitsuzo (The Reality of ‘Japan-U.S. Secret Agreement’ That Was Produced as a Result of Japan's Dependence on the United States for National Security Affairs)”, *Chuo Koron*, May 2010, p. 143.

²³ Sugita, *Kenshou Hikaku no Sentaku*, pp. 60-61.

²⁴ Ibid. p. 61.

²⁵ Martin E. Weinstein, *Japan's Postwar Defense Policy, 1947-1968* (Columbia University Press: 1971), cited in Sugita, *Kenshou Hikaku no Sentaku*, p. 61.

²⁶ Weinstein, *Japan's Postwar Defense Policy, 1947-1968*, cited in Sugita, p. 61.

²⁷ Japanese translation cited in Sugita, *Kenshou Hikaku no Sentaku*, p. 65.

²⁸ Ibid.

nuclear weapon so that the SDF could use them during war.²⁹ Nash also recommended that the United States should educate key Japanese figures about the types and capabilities of nuclear weapons appropriate for Japan. In 1957, the U.S. government also predicted that there was an “even” chance that the Japanese would acquire their own nuclear bomb by 1967.³⁰ In a joint meeting between the U.S. DOS and DOD on September 9, 1957, Douglas MacArthur, Jr., then U.S. ambassador to Japan, stated that Japan planned its defense policy on the assumption that it would have nuclear weapons by 1965.³¹ The Eisenhower administration seems to have been concerned more about the communism threats from the Soviet Union and the PRC than the threat of nuclear proliferation.

The 1960s

Although the following John F. Kennedy administration eventually considered nuclear proliferation to be a serious issue, the U.S. government’s historical records indicate that it continued to view the potential of a nuclear armed Japan with equanimity. In February 1961, the U.S. Air Force recommended a nuclear-sharing program with U.S. allies in Asia to counter a nuclear-armed China.³² In December 1962, the Far Eastern Bureau of the U.S. State Department noted that U.S. military assistance to Japan was intended to prepare the country to possess nuclear weapons under the NATO-type safeguards.³³ The U.S. military was prepared to launch nuclear attacks from Japan's main islands in the 1960s in the event of a crisis in the region, according to State Department documents.³⁴ In fact, Paul Carpenter, a former U.S. military officer, stated in his interview with a Japanese journalist that he had actually handled MK7 and MK28, nuclear bombs, even those in an operationally-ready status, during his assignment to Kadena airbase in Japan from 1957 to 1963.³⁵

In November 1961, Prime Minister Hayato Ikeda expressed his interest in acquiring a nuclear capability during his meeting with Secretary of State Dean Rusk.³⁶ Ikeda seems to have been originally interested in the idea to acquire nuclear weapons from the United States with the expectation that it might contribute to reducing the Japan’s defense budget.³⁷ Additionally, according to former Prime Minister Yasuhiro Nakasone, Ikeda stated to him, “I met with French President (Charles André Joseph Pierre-Marie) de Gaulle in Paris and have come to believe that Japan has to arm itself with nuclear weapon”. According to Nakasone, Ikeda was probably shamed by de Gaulle for Japan’s reliance upon U.S. on its national security

²⁹ Ibid. pp. 61-62.

³⁰ National Intelligence Estimate 100-6-57, "Nuclear Weapons Production in Four Countries - Likelihood and Consequences," June 18, 1957, in the National Security Archive, “National Intelligence Estimates of the Nuclear Proliferation Problem The First Ten Years, 1957-1967”, National Security Archive Electronic Briefing Book No. 155, June 1, 2005, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB155/index.htm>, accessed 30 May 2008.

³¹ Japanese translation cited in Sugita, *Kenshou Hikaku no Sentaku*, pp. 56-57.

³² Sugita, *Kenshou Hikaku no Sentaku*, p. 65.

³³ Ibid. pp. 64-65.

³⁴ “U.S. planned atomic attacks from Japan”, *The Japan Times*, May 9, 2000.

³⁵ Sugita, *Kenshou Hikaku no Sentaku*, pp. 63-64.

³⁶ Memcon, Ikead and Rusk, November 3, 1961, FRUS 1961-1963, Vol. 22, Northeast Asia, 1996, p. 711, cited in Kurosaki, *Kakuheiki to Nichibei Kankei*, p. 42.

³⁷ Kurosaki, *Kakuheiki to Nichibei Kankei*, p. 42.

affairs.³⁸ Also, in Ikeda's private conversation with Masaya Ito, then-secretary to Ikeda, Ikeda explicitly stated, "Japan also has to arm itself with nuclear weapon", prompted by the West Germany's discussion over defense policy.³⁹

In 1963, Japan's Joint Staff Council conducted a classified desk-top simulation exercise (now known as "Mitsuya Study") together with the representatives from the U.S. military forces in Japan, over a scenario of an outbreak of Second Korean War. They concluded that the use of strategic nuclear weapons should be avoided as much as possible to prevent the crisis from escalating into an all-out war between the United States and Soviet Union and that the first use of strategic nuclear weapon must be avoided by any means. They also concluded that the first use of tactical nuclear weapons should be avoided as much as possible, but recommended the limited use of tactical nuclear weapons against adversary's missile bases and landing enemy troops in retaliation for the adversary's nuclear attack. This was a joint study of the nuclear war by Japan and the United States.⁴⁰ When information about this study was leaked to media, however, Prime Minister Sato was forced to apologize. Henceforth, the SDF and government officials refrained from studying about nuclear warfare, except for the issues related to protection against nuclear attack.

Nuclear nonproliferation became a higher priority for the Lyndon B. Johnson administration, which no longer welcomed active allied consideration of the nuclear option. However, it took some time for the Japanese political leaders to adapt to this change. After China conducted its first nuclear weapon test in 1964, Prime Minister Sato stated in his discussion with U.S. Ambassador Edwin O. Reischauer that if an adversary had nuclear weapons, it would be a common sense that Japan also had nuclear weapons.⁴¹ At Japan-U.S. summit in January 1965, Sato explicitly told President Johnson, "...if Chicoms [Chinese Communists] had nuclear weapons, the Japanese also should have them."⁴² Johnson replied that the United States would keep its promise and provide nuclear deterrence in Japan's defense. Sato said that this was exactly what he expected to hear from the U.S. president.⁴³

After China succeeded in nuclear missile test in 1966, Pierre Marie Gallois, a French Air Force Brigade General and an architect of French nuclear strategy, advised Japan to possess nuclear weapons in order to become neutral diplomatically and avoid involvement in war against nuclear China. General Gallois was popular

³⁸ "Kaku wo Ou, Kenshou Nihon no Seisaku: Jou: Nihon 'Hikaku' ni Jirenma (Tracking the Nukes: Reviewing Japan's Policy, Part I. Japan's Non-Nuclear Posture Faced with Dilemma)", *Asahi Shimbun*, August 1, 2007.

³⁹ Masaya Ito, *Ikeda Hayato to Sono Jidai* (Hayato Ikeda and the Epoch) (Asahi Shimbunsha, 1985), p. 234.

⁴⁰ Sugita, *Kenshou Hikaku no Sentaku*, pp. 66-67.

⁴¹ Embtel 2067, Tokyo to SecState, December 29, 1964, NSA, No. 400; and Miki Kase, *Daitouryou ate Nihonkoku Shushou no Gokuhi Fairu* (Secret Files for the US Presidents Concerning the Japanese Prime Ministers) (Mainichi Shimbunsha, Tokyo: 1999), p. 24.

⁴² Central Foreign Policy Files, "Your Meeting with Prime Minister Sato", memorandum for the president from the secretary of state, secret, January 9, 1965, box 2376, RG 59, National Archives, College Park, Md, cited in Kurt M. Campbell and Tsuyoshi Sunohara, "Japan: Thinking the Unthinkable", in Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss, *The Nuclear Tipping Point* (Brookings Institution Press, Washington, D.C.: 2004), p. 222.

⁴³ "Kaku wo Ou, Kenshou Nihon no Seisaku: Jou: Nihon 'Hikaku' ni Jirenma (Tracking the Nukes: Reviewing Japan's Policy, Part I. Japan's Non-Nuclear Posture Faced with Dilemma)", *Asahi Shimbun*, August 1, 2007.

among Japanese conservative.⁴⁴ Suggestions or advice from French senior figures were instrumental in prompting some Japanese key leaders to examine Japan's nuclear option.

Prior to signing the NPT in 1970, there were concerns in Japan that the NPT might determine a country's rank in the international position based upon the criteria of whether or not it had nuclear weapon. In February 1966, reportedly, then-Vice Foreign Minister Takeso Shimoda stated, "non-nuclear weapon states, such as Japan, should press major countries on nuclear disarmament", and that "the non-nuclear weapon states should not wish to be covered by the nuclear umbrella of other countries or ask for their pity for the sake of national security."⁴⁵ (Shimoda later went so far as to invoke controversy in December 1967 by stating: "It is impossible to predict the future of [nuclear-armed] China precisely. I think that the final choice of whether or not Japan may become a nuclear weapon state should be left in the hand of Japan's future generation."⁴⁶) Also, in December 1966, then-senior official of the Japanese Ministry of Foreign Affairs (MOFA) Nobuhiko Ushiba stated in his discussion with then-U.S. Undersecretary of State Nicolas deB Katzenbach that it would be regrettable if a country's rank could be determined by whether or not it had nuclear weapons by signing the NPT, although he stated that Japan did not intend to develop one.⁴⁷

It was within this context when Prime Minister Sato announced the so-called Three Non-nuclear Principles during the Diet session in December 1967. Originally, however, the announcement of these three Principles was not what Sato originally intended. Prior to the Diet session, Sato had initially drafted his speech in order to announce only Japan's policy to refrain from manufacturing and possessing nuclear weapons, effectively only Two Non-nuclear Principles.⁴⁸ However, the draft was revised later to prohibit Japan even from permitting the entry of nuclear weapons into the country or in its air or sea space, due to the strong demands from the ruling Liberal Democratic Party and some of his Cabinet members.⁴⁹ For Sato, at that time, the return of the Okinawa islands, which were then occupied and administered by the U.S., was a top priority agenda. He was concerned that the introduction of the Three Non-nuclear Principles would harden U.S. negotiation posture over the return of Okinawa since the U.S. clearly wanted to deploy nuclear weapons to the Okinawa islands even after their return to Japan. Sato was critical to the position to impose any restriction on U.S. deployment of nuclear weapons to the Okinawa islands.⁵⁰

Concerned about the course of Japan's negotiation with the United States on the Okinawa islands, Sato decided to introduce the Four Nuclear Policies in

⁴⁴ Sugita, *Kenshou Hikaku no Sentaku*, p. 68.

⁴⁵ Asahi Shimbun, February 18, 1966, cited in Akira Kurosaki, *Kakuheiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), p. 196.

⁴⁶ Asahi Shimbun, December 2, 1967, cited in Akira Kurosaki, *Kakuheiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), p. 229.

⁴⁷ Memcon, Ushiba and Katzenbach, December 2, 1966, POL JAPAN-US, 1/1/66, Box 2383, CF, RG59, NA, cited in Akira Kurosaki, *Kakuheiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), pp. 80-81.

⁴⁸ Akira Kurosaki, *Kakuheiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), p. 210.

⁴⁹ Akihiko Tanaka, *Anzen Hoshou* (National Security) (Yomiuri Shimbunsha, Tokyo: 1997), p. 222.

⁵⁰ Record of the 58th session of the Budget Committee of the Upper House of the Diet, March 25, 1968, p. 21, cited in Akira Kurosaki, *Kakuheiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), p. 210.

January 1968, which explicitly positioned Japan's reliance upon U.S. extended deterrence as a declaratory policy, for the first time. Sato had originally intended to emphasize that the Three Non-nuclear Principles could be sustained only in conjunction with the other three Nuclear Policies. Such explicit statement was deleted eventually, however, because strong domestic support for the Three Non-nuclear Principles emerged unexpectedly.⁵¹ Frustrated with such domestic environment, Sato explicitly stated in his discussion with then-U.S. Ambassador to Japan U. Alexis Johnson in January 1969 that the Three Non-nuclear Principles were "nonsense," lamenting the lack of Japanese public understanding of national defense issues.⁵² Eventually, in November 1969, a secret deal was concluded between Sato and U.S. President Richard M. Nixon to return the Okinawa islands to Japan on the condition that Japan would not oppose to U.S. introduction of nuclear weapons to these islands without prior consultation with Japan.

On the U.S. part, however, by 1965, the Pentagon officials decided that the Japanese "nuclear allergy" was too difficult to cure, and removed non-nuclear bomb components from Japan in the mid 1960s. In 1967 at the height of the intensity of the Vietnam War, the U.S. military stored approximately 1,300 nuclear weapons in Okinawa, but they were removed by June 1972.⁵³ However, it was regarded as vital for the U.S. military to be able to deploy nuclear weapons to Japan at a time of crisis.⁵⁴

In Japan, on the other hand, from late 1960s through early 1970s, a few informal study groups were formed to examine Japan's nuclear option, which produced detailed reports resembling to those that appeared after the 1990s.

Thinking about the Nuclear Option: The Emergence of Policy Studies

In the late 1960s, a private study group, Research Commission on National Security (*Anzen Hoshou Chousa Kai*) was formed, which was led by Osamu Kaibara, then Director General of the National Defense Council (*Kokubou Kaigi*). The study group concluded that a plutonium-based atomic bomb could be produced more easily than uranium-based weapon, that the graphite-moderated reactor in Tokaimura was suited for the production of weapon-grade plutonium, and that the submarine would be the most appropriate launch platform for a nuclear-tipped missile.⁵⁵ The report explained the mechanism of uranium enrichment and plutonium production, and concluded that Japan could produce 200-300 atomic bombs from indigenous natural uranium and that the nuclear reactor in Tokaimura could produce weapon-grade

⁵¹ Kei Wakaizumi, *Tasaku Nakarishi wo Shinzemu to Hossu* (Believing that There Was No Other Option Available) (Bungei Shunju, Tokyo: 1994), pp. 140-141.

⁵² "Hikaku 3 Gensoku ha Nansensu [The Three Non-nuclear Principles Are Nonsense]," *Kyodo News*, June 10, 2000.

⁵³ Norris, Arkin, and Burr, "Where They Were", 30-31; Ministry of Foreign Affairs, *Iwayuru 'Mitsuyaku' Mondai ni kansuru Yuushikisha Inkai Houkokusho* (A Report by the Expert Committee on the So-Called "Japan-U.S. Secret Agreement"), 9 March 2010, p. 18.

⁵⁴ For example, in 1969, U. A. Johnson, then Undersecretary of State, stated that it was vital for the United States to be able to locate non-strategic nuclear weapons in Okinawa in order to sustain nuclear deterrence, during his meeting with Kazuo Aichi, then Japanese Minister of Foreign Affairs. See, Ministry of Foreign Affairs, *Iwayuru 'Mitsuyaku' Mondai ni kansuru Yuushikisha Inkai Houkokusho*, p. 62.

⁵⁵ Research Commission on National Security (*Anzen Hoshou Chousa Kai*), *Nihon no Anzen Hoshou 1968 nenban* (Japan's National Security 1968) (Asagumo Shuppansha, Tokyo: 1968), cited in Sugita, *Kenshou Hikaku no Sentaku*, pp. 67-70.

plutonium in the amount of 20 atomic bombs per year. This report also carried a list of the Japanese companies and research institutions that had the necessary technologies for producing atomic bombs. While some conclusions in this report seem questionable, this report attempted a comprehensive analysis of Japan's nuclear capabilities, including the production of nuclear warhead, hydrogen bomb, and delivery vehicles, as well as nuclear complex.⁵⁶ The study group, however, voiced its opposition to a nuclear weapons program because of huge production costs and significant political impact on neighboring countries. The group concluded that the best option for Japan was to rely upon U.S. nuclear deterrence rather than being feared by the international community.⁵⁷

From 1967 until 1970, the Cabinet's Office of Research (COR) (*Naikaku Chousashitsu*) also secretly established a project called "The Study Group on Democracy," to examine if it was possible and desirable for Japan to develop its own nuclear force.⁵⁸ At that time, many Japanese nationalists and conservatives expressed support for Japan's nuclear options, triggered by China's nuclear testing and the international negotiation over the NPT. COR members believed that the government should examine Japan's nuclear options to counter those arguments by the nuclear advocates.⁵⁹ The group concluded that a nuclear weapons program was not desirable because it would be too expensive, fail to gain domestic support, and generate security dilemma in the region.⁶⁰ It concluded that Japan could produce a small number of plutonium-based atomic bombs, but that it would find it difficult to establish a reliable nuclear force.⁶¹ The plutonium stored at the Tokaimura facilities was subject to IAEA inspection and could not be diverted for military use. Also, Japan did not have a reprocessing plant to extract plutonium from spent nuclear fuel at that time. The group noted that more than 50 percent of Japan's population and most industrial centers were concentrated in only 18.9 percent areas of Japan's territories, making Japan very vulnerable to nuclear attack. The COR group concluded an indigenous nuclear weapon would not contribute to deterrence.⁶² They also stated that the possession of nuclear weapon was no longer a necessary condition to be a major power, and that Japan must solve security problems from a completely new viewpoint incorporating multiple perspectives.⁶³

The *Gaikou Seisaku Kikaku Iinkai* (Foreign Policy Planning Committee) of the Ministry of Foreign Affairs (MOFA) also conducted an inquiry into Japan's nuclear future. In 1969, the MOFA gathered "the best and the brightest" above the division-director level, and produced an internal document, "*Waga Kuni no Gaiko Seisaku Taiko* (Guidelines of Japan's Foreign Policy)." They also concluded that Japan should sustain the policy not to possess nuclear weapon at least for the time being, but that it

⁵⁶ In 1981, a politician of the opposition party obtained a copy of the report on Japan's nuclear capabilities produced by the Research Commission on National Security (*Anzen Hoshou Chousa Kai*). Some of the contents of this report were introduced during the session of the Diet's Upper House Committee on the Settlement of Account, on March 30 in 1981. See, *Kessan Iinkai Kaigiroku Daigogou* (The Record of the Meeting of the Committee on the Settlement of Account, No. 5), 30 March 1981.

⁵⁷ Sugita, *Kenshou Hikaku no Sentaku*, pp. 68-70.

⁵⁸ "Kakubuso Kano daga Motenu [Nuclear Armament Technically Possible, but Not Recommendable]," *Asahi Shimbun*, November 13, 1994.

⁵⁹ Sugita, *Kenshou Hikaku no Sentaku*, pp. 70-71.

⁶⁰ *Ibid.* 71-72.

⁶¹ *Ibid.*

⁶² *Ibid.*

⁶³ *Ibid.*

was necessary to develop latent nuclear capability.⁶⁴ The report stressed that it was necessary to have the potential capabilities, economically and technically, to produce nuclear weapons and to avoid any damage to such latent capabilities.⁶⁵ They also stated that it was important to undertake a campaign to educate the public that the decision on nuclear weapons policy should be made by strategic (not ideological or emotional) calculations of the merits and demerits under the international environment. It stressed that the Japanese government should make every effort to avoid domestic panic acrimony even if the United States should decide to locate non-strategic nuclear weapons in Japan in the event of war.⁶⁶

In 1970, Defense Minister Yasuhiro Nanasone (who became prime minister in the 1980s) also ordered a group of experts to examine what it would take for Japan to arm itself with nuclear weapon. The group concluded that it would take five years at maximum and an investment of 200 billion yen, which was about equal to 40 percent of the FY 1970 defense budget. According to Nakasone, the lack of a nuclear testing site in Japan was perceived to be a major hurdle.⁶⁷ Eventually, the Japanese Defense White Paper commissioned by Nakasone stated: “as for defensive nuclear weapons, it would be possible in a legal sense to possess small-yield, tactical, purely defensive nuclear weapons without violating the Constitution. In view of the danger of inviting adverse foreign reactions and large-scale war, we will follow the policy of not acquiring nuclear weapons at present.”⁶⁸

In sum, the nuclear policy reviews and studies undertaken prior to the 1970s generally found that Japan could potentially build a nuclear arsenal, but that the strategic benefits did not outweigh the economic and political costs of an indigenous nuclear option. These studies highlighted the core tenets of Japan's “Four Nuclear Policies” that remain in place today. However, Japan decided to possess an advanced nuclear infrastructure that is often described as a latent nuclear capability.

Hesitation over the NPT

Japan signed the NPT in 1970, but its ratification was delayed until 1976, which was interpreted by the U.S. as an indication of Japan's hidden aspiration for nuclear armament. In fact, the Japanese government was concerned at that time about securing equal treatment over the IAEA safeguards vis-à-vis the European Atomic Energy Community (EURATOM).⁶⁹ The Japanese government was pressured by the domestic industry and politicians to pursue IAEA safeguards which could be equivalent to the one with EURATOM so that Japan alone would not be left in an unequal position. As such, Japan was waiting for the conclusions of the safeguards agreements between IAEA and the member states of the EURATOM which were

⁶⁴ Mainichi Shimbun Shakaibu ed., *Usagi no Mimi to Hato no Yume: Nihon no Kaku to Jouhou Senryaku* (Rabbit's Ear and Dove's Dream: Japan's Nuclear and Information Strategy) (Liberta Shuppan, Tokyo: 1995); and Kurosaki, *Kaku Heiki to Nichibei Kankei*, p. 278.

⁶⁵ Mainichi Shimbun Shakaibu ed., *Usagi no Mimi to Hato no Yume: Nihon no Kaku to Jouhou Senryaku* (Rabbit's Ears and Dove's Dream: Japan's Nuclear and Information Strategy) (Liberta Shuppan, Tokyo: 1995); and Akira Kurosaki, *Kaku Heiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), p. 278.

⁶⁶ Sugita, *Kenshou Hikaku no Sentaku*, p. 76.

⁶⁷ Yasuhiro Nakasone, *Jiseiroku* (Record of Reflection) (Shinchosha, Tokyo: 2004), pp. 224-225.

⁶⁸ “Gist of White Paper on Defense”, *Japan Times*, October 1970, p. 20, cited in Campbell and Sunohara, “Japan: Thinking the Unthinkable”, p. 222.

⁶⁹ Akira Kurosaki, *Kaku Heiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), pp. 247-248.

completed in 1973. Even after this development, however, it took another three years for Japan to ratify the treaty because of the remaining domestic concern that the treaty might pose considerable constraints on Japan's use of nuclear energy for peaceful purposes. The political efforts to forge domestic consensus as the issue was further complicated by the changes of administrations.⁷⁰

In order to soothe down Japan's concern over the "second-rank" status by signing the NPT and to guide Japan to holding on to the non-nuclear status, the U.S. administration in the 1960s decided to assist Japan with space development, hoping that space exploration would fill in Japan's desire for a "first-rank" country.⁷¹ Even so, the U.S. was continuously concerned about the prospect of Japan's nuclear armament in the 1970s. Although Japan ratified the NPT in 1976 eventually, Japan initiated operation of plutonium reprocessing facilities in Tokaimura in 1977, which added U.S. concern.

U.S. Extended Deterrence and Latent Nuclear Capability

Japan's reliance upon U.S. extended deterrence was clearly articulated in Japan's defense strategy. In October 1976, the Outline of Defense Planning (*Bouei Keikaku Taikou*) stated, "Japan relies upon U.S. nuclear deterrence against nuclear threats."⁷² The decision to rely on the U.S. nuclear umbrella was made in tandem with the strategic calculation to maintain a latent nuclear capability. In the 1970s, Takuya Kubo, then Bureau Director of Defense Policy of Japan Defense Agency, wrote a famous article, *KB Ronbun* (An Article Written by KB), which stated: "...if Japan prepares latent nuclear capability that would enable Japan to develop significant nuclear armament at anytime...the United States would hope to sustain the Japan-U.S. security system by providing a nuclear guarantee to Japan, because otherwise, the United States would be afraid of a rapid deterioration of the stability "...in the international relations triggered by nuclear proliferation."⁷³

These records indicate that during the Cold War, Japanese policymakers clearly recognized the strategic utility in holding latent nuclear capability since the 1960s. This latent nuclear capability was expected to address any potential uncertainty surrounding the U.S. commitment to provide extended deterrence to Japan, in Kubo's view. Should the United States become reluctant about reassurance, Japan's latent nuclear capability was expected, at least theoretically, to remind the United States about Japan's indigenous nuclear option. Also, there may have been expectation among the Japanese policymakers that such latent capabilities could supplement U.S. nuclear deterrence.

On the other hand, Japan's atomic energy policy was also affected by another serious concern over the unstable oil supply from the Middle East, after the oil price shocks in 1973. Japan's pursuit of nuclear fuel cycle was motivated strongly by the requirement for energy security as well.

The possibility of Japan's nuclear option attracted attention of the U.S. government continuously. Since late 1950s, the U.S. government was certainly kept

⁷⁰ Akira Kurosaki, *Kaku Heiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), pp. 248-260.

⁷¹ Kurosaki, *Kakuheiki to Nichibei Kankei*, pp. 108-146.

⁷² Asahi Shimbun, October 29, 1976, cited in Kurosaki, *Kakuheiki to Nichibei Kankei*, p. 214.

⁷³ Takuya Kubo, "Boueiriyoku Seibi no Kangaekata (A Framework to Consider the Arrangement of Japan's Defense Capabilities)", February 20, 1971, <http://www.ioc.u-tokyo.ac.jp/~worldjpn/documents/texts/JPSC/19710220.O1J.html>, accessed 30 April 2008.

concerned about the prospect for Japan's nuclear armament constantly. Below is a list of some of the examples of the U.S. estimates:

- In 1961, Japan, along with Sweden, Israel, France, West Germany, India, and other were categorized as the “likely group” to develop nuclear weapons.⁷⁴ It was estimated that Japan could also go nuclear in the wake of a Chinese test or if it lost confidence in U.S. security guarantees.
- Similarly, in 1964, the so-called “Thompson Committee” was established under the Committee of Principals at the direction of then-Secretary of State Dean Rusk in order to make recommendation to the U.S. government to stop the horizontal proliferation of nuclear weapons. The Thompson Committee analysed in June 1965 that Japan would be able to conduct the first nuclear test by 1971, to produce about 10-30 nuclear weapons annually after the test, and to produce about 100 nuclear-tipped MRBM/IRBM by 1975.⁷⁵
- In the National Intelligence Estimate of 1967, Japan was deemed one of the “serious candidates” for acquiring nuclear weapons and missile delivery systems.⁷⁶
- Also, reportedly, in July 1971, U.S. Secretary of Defence Melvin R. Laird commented that Japan might be able to develop and possess its own nuclear force in the 1980s.⁷⁷

Strengthening Japan-U.S. Alliance

In the early 1980s, Ronald Reagan strengthened the Japan-U.S. alliance by deepening U.S. presence in the Asia Pacific region. In the 1980s, Japanese officials became less concerned about the “decoupling effect” produced by the Soviet-American nuclear confrontation. As Mataka Kamiya points out, during this period, Japan's defense posture was predicated on the notion that if Japan was subjected to a Soviet nuclear attack, the strike would be undertaken in the context of a global

⁷⁴ National Intelligence Estimate, NIE 4-3-61, "Nuclear Weapons and Delivery Capabilities of Free World Countries Other than the US and UK," September 21, 1961, Secret, Excised copy, (Source: microfiche supplement to U.S. Department of State, *Foreign Relations of the United States, 1961-1963, Volume VII, Arms Control and Disarmament* (Washington, D.C., U.S. Government Printing Office, 1997)), posted on the website of the National Security Archive, “National Intelligence Estimates of the Nuclear Proliferation Problem The First Ten Years, 1957-1967”, National Security Archive Electronic Briefing Book No. 155, June 1, 2005.

⁷⁵ Memo, Foster to the Member of the Committee of Principals, June 25, 1965, DEF (14-A), Thompson Committee, Box 11, PMDA, 1961-1966, Lot Files, RG59, NA; and Paper, “Annex B: Economic Factors,” *ibid.* Both documents were cited in Akira Kurosaki, *Kaku Heiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), p. 61.

⁷⁶ NIE 4-67, "Proliferation of Missile Delivery Systems for Nuclear Weapons," 26 January 1967, secret, excised copy, as released under appeal, March 2005 (Source: Lyndon B. Johnson Library, National Security Files, National Intelligence Estimates, box 1, 4 Arms and Disarmament), posted on the website of the National Security Archive, “National Intelligence Estimates of the Nuclear Proliferation Problem The First Ten Years, 1957-1967”, National Security Archive Electronic Briefing Book No. 155, June 1, 2005.

⁷⁷ Asahi Shimbun, July 9, 1971, cited in Akira Kurosaki, *Kaku Heiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations) (Yushisha, Tokyo: 2006), pp. 237-238.

nuclear war between the United States and the USSR.⁷⁸ Under these circumstances, the United States would probably be subjected to a nuclear attack as well. It was unlikely that Japan alone would face such a nuclear attack.

Nevertheless, Japanese policymakers reminded U.S. officials about its latent nuclear capability as the United States began negotiations on the movement of Soviet SS-20 missiles from the European theater to the Russian Far East as part of the Intermediate-Range Nuclear Forces (INF) Treaty. The U.S. and the USSR negotiators were alerted by some Japanese experts' argument for a nuclear option if the USSR SS-20 should be transported to the vicinity of Japan, according to a senior U.S. negotiator. Eventually, the United States and the USSR eventually agreed on the "zero-option." Namely, the U.S. removed all NATO's INF and, in return, the USSR also removed all SS-20s without transporting them to Far East.

Changing Security Environment in the Twenty-First Century and New Debate on Nuclear Option

The Debate on a Nuclear Option after the End of the Cold War

After the Cold War, in Japan's conception, the risk of military confrontation among the states in Northeast Asia has become salient, especially in light of the development of North Korean nuclear weapons and ballistic missiles and the increasing tempo of Chinese military modernization with an unclear direction. The potential resurgence of Russia's hegemonic posture is another concern. For Japan, the Asian regional security landscape stands in contrast to the situation in Europe where the risk of traditional military confrontation among the major powers has decreased significantly. The countries and region in the Asian Pacific region strive to forge multilateral community while coping with the increasing challenges posed by traditional security threats of state conflicts, as well as emerging security challenges, such as terrorism, criminal networks, natural disasters and infectious diseases.

Within this context, in the 1990s, especially driven by the development of North Korea's provocations, reports on Japan's examination of nuclear options surfaced in the media again. In the 1990s, several internal study groups in the Japanese Defense Agency (JDA) examined whether Japan's nuclear option was desirable, and reached to the same conclusion with the previous studies. One such group concluded in 1995 that a nuclear-weapons program was undesirable because of its cost and negative effects, and that there was no strategic merit for Japan to join the nuclear arms race. The report suggested that Japan should instead maintain a posture of "a proud loser" (*Haiboku Shugi*) in the nuclear arms race.⁷⁹ Given the steady strengthening of the Japan-U.S. alliance, these internal reviews on Japan's nuclear option were rather meant to prove the negatives of nuclear options.

Even so, however, renewed concern for decoupling has become salient increasingly in the minds of Japanese strategic planners. North Korea may not yet have the capability to strike the U.S. but already has such capabilities vis-à-vis Japan.

⁷⁸ Remarks by Mataka Kamiya at a meeting in Japan Institute of International Affairs, May 11, 2007, Tokyo, Japan. Also see, Wakatsuki, *Zenhoui Gaikou no Jidai*; and Shingo Nakajima, *Sengo Nihon no Bouei Seisaku* (Japan's Defense Policy after the Second World War) (Keio University Press, Tokyo: 2006).

⁷⁹ "Hikaku Power: Haibokushugi Tsuranuki Ginen Harae [Non-nuclear Power: Sustain 'Defeatism' and Expel Skepticism of Other Countries]," *Asahi Shimbun*, August 4, 1999.

China represents the most important strategic challenge to Japan. For Japan, a rising China presents a multifaceted character: the largest economic partner; potential partner in coping with regional and global affairs; diplomatic rival; and potentially grave military threat. China has been advancing an access denial strategy and strengthening deterrence vis-à-vis the United States. China has also been strengthening its war-fighting capability in the theater, and rapidly improving its naval and air power. So far, the United States maintains a military force second to none. But, as the United States and Russia advance nuclear disarmament, China may find a window of opportunity to achieve some strategic parity with the United States in the years ahead. What if China strengthens its capabilities to strike U.S. homeland with nukes continuously? Would Washington still be willing to protect Japan even if U.S. cities were held at risk by Beijing?

In this context, concerns have been raised about the credibility of U.S. commitment to protect Japan, especially vis-à-vis China. While Japan and the U.S. have pursued similar policy to engage China, Japanese policymakers have frequently felt that there may be a gap between Japan and the U.S. regarding the degree to which each country views China as a subject of deterrence, and are concerned about a scenario of encroachment between China and the United States over the head of Japan. This comes as a surprise to many U.S. security specialists who find it hard to envision a Sino-U.S. relationship so close as to threaten Japanese interests.⁸⁰

These concerns have prompted Japan to reshape its strategic thinking in the 21st century. Several Japanese political leaders, experts, and commentators have initiated open debates on Japan's nuclear option in this changing security environment.

The Debates on Nuclear Option in the 21st Century

As North Korea escalated its provocative behaviors through the testing of nuclear weapons and missiles since 2002, the debate about the nuclear option resurfaced in Japan. The Japanese public tolerates this debate, although they do not support Japan nuclear option. Such discussion has remained fairly marginal in the Japanese media, on contrary to the international concerns over Japan's nuclear option.

Experts and Commentators

In the February 2003 issue of *Shokun!*, a conservative opinion journal in Japan, for example, Kyorin University Professor Tadae Takubo and Mr. Nagao Hyodo, former Japanese Ambassador to Poland, argued that Japan certainly has a "nuclear card," asserting that a principle of "never say never" dominates international politics. Japan should never declare that it would never possess nuclear weapons.

The August 2003 issue of *Shokun!* also featured a special section on Japan's nuclear options, with participation of forty-five experts and opinion leaders. Kyoto University Professor Terumasa Nakanishi, a conservative realist, argued that Japan should acquire a nuclear infrastructure that would allow it to acquire nuclear weapons on short notice because China would continuously strengthen its power projection capabilities while U.S. extended deterrence might become unreliable. According to Nakanishi, three scenarios could materialize in the future: (1) The credibility of U.S. commitment to the defense of Japan might erode; (2) China might acquire a blue-

⁸⁰ Ralph A. Cossa, "Chairman's Report, U.S.-Japan Strategic Dialogue", Feb. 25-26, 2008, Maui, Hawaii, Pacific Forum CSIS.

water navy and establish a permanent naval presence around Okinawa or the Senkaku Islands, which are the focal point of territorial disputes between Japan and China; and (3) the international community would acquiesce to North Korea's obvious interest in maintaining a nuclear arsenal. Nakanishi framed his argument with more emphasis upon the future threat of China than the existing threat from North Korea.⁸¹ Nakanishi argued that the NPT had begun to demonstrate a major breakdown, and that it became less important for the U.S. to protect Japan than during the Cold War, given the increasing risk that China and North Korea might threaten to strike U.S. cities with nukes. He cited the French decision to protect itself with nuclear weapons during the Cold War, and argued that missile defense would not be able to achieve deterrence effect equivalent to the one of nuclear weapons. Also he argued that Japan's nuclear armament would constrain China's aberrant behaviors to challenge Japan's territorial integrity, such as intruding into Japan's territorial waters and exploring natural resources from contested waters, for fear of possible escalation of crisis. Nakanishi concluded that it would take several decades, not several years, for Japan to acquire credible nuclear force because Japan lacked the basic infrastructure to develop and possess nuclear weapons as well as basic instruments such as C4I system and a nuclear doctrine, in addition to immature Japan's national security policy.⁸²

Citing then U.S. Vice President Dick Cheney's 2003 warning that North Korean nuclear threats might cause Japan to develop a nuclear arsenal, Nakanishi and other proponents of Japan's nuclear option mistakenly interpreted such comments of senior U.S. senior officials and Cabinet members as a signal of U.S. tacit endorsement of Japan's nuclear option.⁸³ This *illusion* about the U.S. support for Japan's nuclear option constituted an important assumption of their argument because almost *none* of these pragmatists argued for Japan's independent nuclear option *without* the U.S. help. Even those proponents acknowledged that approval and cooperation from other major nuclear suppliers, especially the U.S., would be essential for Japan's nuclear armament in order to overcome technical difficulties as well as legal and political constraints on Japan's use of nuclear materials for non-civilian purposes.⁸⁴

In fact, there were widespread views in Japan that the real utility of Japan's discussion of a nuclear option was to send a warning signal to China and North Korea, and simultaneously, to pose indirect pressure upon the United States to continue its nuclear commitment to protect Japan.⁸⁵ For example, Terumasa Nakanish argued that the debates on Japan's nuclear option itself could contribute to strengthening nuclear deterrence vis-à-vis China and North Korea.⁸⁶ Also, former Japanese Ambassador to Thailand, Hisahiko Okazaki argued that Japan's nuclear armament should proceed in tandem with the strengthened bilateral alliance with the United States, even if Japan's own nuclear weapons might bring only marginal deterrent effect. In his view, while

⁸¹ Terumasa Nakanishi, ed., *'Nihon Kaku Busou' no Ronten* (Issues of Japan's Nuclear Armament) (PHP Publishing Co., Tokyo: 2006), pp. 14-58.

⁸² Terumasa Nakanishi, "Nihonkoku Kakubushou heno Ketsudan [Decision to Arm Japan with Nuclear Weapons]," *Shokun!* August 2003; and Kan Itoh, "No toha Iwanai Amerika [America Would Not Say 'No' to Japan's Nuclear Armament]," *Shokun!*, August 2003, p. 117.

⁸³ Nakanishi, "Nihonkoku Kakubushou heno Ketsudan"; and Nakanishi, *Nihon Kaku Busou' no Ronten*.

⁸⁴ Nisohachi Hyodo, "'Nihon Kaku Busou' no Gutaiteki Sukeju-ru (A Concrete Schedule of Japan's Nuclear Armament)", in Nakanishi, ed., *'Nihon Kaku Busou' no Ronten*, pp. 174-176.

⁸⁵ Hisahiko Okazaki, "Time to consider a nuclear strategy for Japan", *The Daily Yomiuri*, April 8, 2007.

⁸⁶ Terumasa Nakanishi, ed., *'Nihon Kaku Busou' no Ronten* (Issues of Japan's Nuclear Armament) (PHP Publishing Co., Tokyo: 2006), pp. 56-58

recognizing that Japan's nuclear armament under U.S. extended nuclear deterrence could be rather *redundant* from a military perspective, it could have the benefit of complicating China's strategic calculation on the use of nuclear weapons, as French nuclear arms did with regard to the Soviet Union during the Cold War.⁸⁷

Given the lack of strategic depth, many Japanese experts believed that Japan would have to pursue sea-based deployment of a nuclear force by acquiring a new submarine as a strategic platform. Japan would also need to institute a new naval doctrine and train personnel. All these initiatives would take at least a decade to complete. Some proponents of nuclear options suggested that nuclear-tipped cruise missiles could be deployed on existing destroyers, creating a quicker way to deploy a nuclear delivery system,⁸⁸ but others argued that surface combatants lack the requisite survivability as a nuclear delivery system.⁸⁹ Some in this line of thinking even suggested that Japan should develop nuclear weapons for naval use under a closely coordinated command with the U.S. military. They argued that Japan should adopt a nuclear doctrine similar to the British one, which is centered on coordinated command with the U.S., rather than the French model which pursues an independent nuclear capability.⁹⁰

On the other hand, however, occasionally some argued that Japan should develop independent nuclear capabilities. Nisohachi Hyodo, a commentator who advocates for Japan's nuclear option, argues that Japan should first develop a crude nuclear bomb for a bomber, then a nuclear warhead for a ground-based ballistic missile, and finally a nuclear warhead for a cruise missile.⁹¹ However, there does not appear to be any elaboration about how such weapon could be employed under what type of nuclear doctrine, nor how such nuclear weapons could be integrated into Japan's war-fighting doctrine.

There is also another view that even if Japan could not possess credible second strike capability, its nuclear option might possess a strategic utility by complicating the calculation of the adversary who may attempt to drive a wedge between the United States and Japan by exploring decoupling effect to threaten Japan but not the U.S. Kiyoshi Sugawa, then-senior staff member on national security affairs of the Democratic Party of Japan, explained this view in his novel published in 2007.⁹² According to this view, nuclear weapon states, such as the United Kingdom, France, Pakistan, and Israel, have decided to possess limited nuclear deterrence even though they may not necessarily possess credible second strike capabilities. In this view, limited nuclear deterrence would be sufficient since Japan's primary focus is no longer the massive nuclear attacks from the Soviet Union but a far smaller number of nuclear weapons of China and North Korea.

Sporadically, some Japanese politicians urged Japan to create a nuclear arsenal, or simply referred to the uncertainty of Japan's future nuclear posture or the

⁸⁷ Hisahiko Okazaki, "*Mazu Gijutsutekina Men wo Tsumeyo* [First, We Needs to Examine the Technical Feasibility of Nuclear Option]," *Shokun!* (August 2003), p. 58.

⁸⁸ See, for example, a comment of Kan Itoh, in Terumasa Nakanishi, ed., '*Nihon Kaku Busou' no Ronten* (Issues of Japan's Nuclear Armament) (PHP Publishing Co., Tokyo: 2006), 137-138.

⁸⁹ See, for example, Hyodo, "'*Nihon Kaku Busou' no Gutaiteki Sukeju-ru*", p. 138.

⁹⁰ See, for example, Itoh, "*No toha Iwanai Amerika*", p. 117.

⁹¹ Nisohachi Hyodo, "'*Nihon Kaku Busou' no Gutaiteki Sukeju-ru* (A Concrete Schedule of Japan's Nuclear Armament)", in Terumasa Nakanishi, ed., '*Nihon Kaku Busou' no Ronten* (Issues of Japan's Nuclear Armament) (PHP Publishing Co., Tokyo: 2006), pp. 179-186.

⁹² Kiyoshi Sugawa, *Beichou Kaisen* (An Outbreak of U.S.-DPRK War) (Kodansha, Tokyo: 2007), pp. 101-109.

necessity to discuss Japan's nuclear option freely, instead of keeping it a taboo. They argued that it was rather *unhealthy* not to discuss Japan's nuclear option simply because of the memory of Hiroshima and Nagasaki. In general, however, this remains difficult for Japanese politicians to advocate nuclear weapons without risking their careers. Careless comments can trigger controversy, leading to political suicide.

Politicians

The October 1999 edition of *Playboy Japan* ran an interview with then-Parliamentary Vice Minister of the Japan Defense Agency, Shingo Nishimura. He argued that Japan's failure not to consider the possession of nuclear weapons left the nation free for "rape" in the international system. This comment appeared during the steady increase in North Korea's missiles and nuclear capabilities. Nishimura was promptly forced to resign.

Even innocent comments by Cabinet members were easily politicized and became quite controversial. In May-June 2002, then-Deputy Chief Cabinet Secretary Shinzo Abe came under severe criticism for his comment during a speech that the Japanese constitution permitted Japan's possession of nuclear weapons with a range limited to that minimally necessary for self-defense.⁹³ Although he simply explained the official interpretation of the Constitution, it generated significant political controversy. Specifically, in response to a question during a speech at Waseda University in Tokyo, Abe stated that the Japanese constitution permits Japan's possession of nuclear weapons with a range limited to that minimally necessary for self-defense.⁹⁴ Abe simply meant to explain the purely legal interpretation of the Constitution, which was certainly correct as a legal interpretation of Japan's constitution but proved very inappropriate politically.

Subsequently thereafter, in a private conversation a group of journalists asked Fukuda about his reaction to Abe's comment. After defending Abe's comments by repeating the Japanese government's traditional interpretation of the Constitution, Fukuda reportedly said that nobody would be able to predict the future and that if the international security environment should change dramatically, it could be conceivable that some citizens might even begin to argue that Japan should possess nuclear weapons.⁹⁵ This was, again, correct from a legal perspective but proved politically very inappropriate. Fukuda was severely criticized for his political incorrectness and accused of his "hidden militaristic intentions."

Following the controversy over Fukuda's comment on nuclear weapons, Tokyo Governor Shintaro Ishihara, one of the most popular conservative politicians in Japan, stated that Japan should become ready to produce nuclear weapons if China would not stop modernizing its nuclear weapons capabilities. Ishihara's comment was more controversial, but the public was well aware that a Tokyo governor had no influence over the national foreign policymaking process.

Similarly, after North Korea's nuclear test in October 2006, several politicians argued in favour of examining Japan's nuclear option. For example, Shoichi Nakagawa, the Chairman of the Policy Research Council of the ruling Liberal

⁹³ "Seikai Gekishin, Abe Shinzo Kanbou Fukuchoukan ga Katatta Monosugoi Nakami, Kaku Heiki no Shiyou ha Iken deha nai (Political World Shaken Severely by the Remarks of Deputy Cabinet Secretary Shinzo Abe: the Use of Nuclear Weapon Would Not Violate Japan's Constitution)", *Sunday Mainichi*, June 2, 2002.

⁹⁴ "Ibid.

⁹⁵ *Mainichi Shimbun*, June 1, and 4, 2002.

Democratic Party (LDP) and known for his conservative orientation, made public remarks on Japan's nuclear option repeatedly after North Korea's nuclear testing, which made headlines in the world. He continued to repeat this remark despite the strong pressures from the other LDP leaders to retract his comments. However, even he did not go beyond saying simply that Japan needed open discussions on its nuclear option, without articulating his view on the very question he posed. In the end, Nakagawa's comment did not go beyond political rhetorical without any strategic framework. He passed away in 2009.

Foreign Minister Taro Aso (who later became prime minister in 2008) also stated that it would be an option for Japan to choose not to have nuclear weapon after evaluating the merits of various options. Aso clearly stated his opposition to Japan's nuclear option, especially because of Japan's geographical vulnerability which lacks strategic depth. Even so, he repeatedly argued that such examination to "think the unthinkable" would contribute to deepening pragmatic discussion on national security affairs, and that it would be rather counter-proactive and dangerous if such discussion could be kept a taboo.⁹⁶

In addition, in July 2007, then-Defence Minister Fumio Kyuma stated, "I understand the bombing (in Nagasaki) brought the war to its end. I think it was something that couldn't be helped." He was severely criticised by the public that his remarks justified the U.S. atomic bombing of Japan, and three days later, he was forced to resign.⁹⁷ In the national election in 2009, he lost a Diet seat.

Characteristics of the Debate in the 2000s

In summary, these debates have revealed several things about contemporary discussions on Japan's nuclear posture. First, a majority of the Japanese public does not seem to perceive neighbouring countries' nuclear weapons as a priority concern in their daily life, although a general sense of insecurity increased since the 1990s. Even after North Korea's nuclear testing in October 2006 and May 2009, Japan's domestic reactions to North Korea's nuclear testing were restrained overall. There was hardly any serious discussion to increase Japan's defence budget.⁹⁸ Rather, the reduction of the government's deficits remains a top priority for the government, and the Japanese SDFs are obliged to cut back their personnel and procurement. Also, while China continuously modernizes its military forces, China became the largest trade partner for Japan in 2007.

Secondly, it is no longer a taboo to discuss nuclear strategy and the hypothetical possibility that Japan could require such weapons. Although a nuclear option is still unacceptable to the general public, there is recognition that such an option could at least be openly discussed. Particularly, the next generation politicians and experts are relatively familiar with nuclear strategic issues; though not necessarily favor to change Japan's basic nuclear posture, because many of them graduated from international studies programs in the U.S. However, it still remains very difficult and controversial for Japanese politicians to advocate nuclear weapons without risking his/her career. Careless comments can trigger a huge controversy and may lead to political suicide.

⁹⁶ Taro Aso, *Jiyu to Hanei no Ko* (Arc of Freedom and Prosperity: Japan's Expanding Diplomatic Horizons) (Gentosha, Tokyo: 2007), p. 108.

⁹⁷ Hiroko Nakata, "Kyuma exits over A-bomb gaffe", *The Japan Times*, July 4, 2007.

⁹⁸ Hajime Izumi and Katsuhisa Furukawa, "Not Going Nuclear: Japan's Response to North Korea's Nuclear Test", *Arms Control Today*, June 2007.

Third, among the pragmatic thinkers who support examining (though not necessarily pursuing) Japan's nuclear options, many of them favor a strong Japan-U.S. alliance. Many pragmatists view that North Korea's military threat could be deterred by the combination of U.S. extended deterrence, conventional capabilities, and missile defense. Instead, they view a long-term challenges posed by China, rather than North Korea, as significant Japan's strategic challenge.

Technical Capabilities

Nuclear weapon experts abroad have argued that Japan has sufficient technical capabilities to produce crude nuclear weapons. Japan has a nuclear fuel-cycle program to produce plutonium, although it is reactor-grade plutonium in the form of mixed-oxide (MOX) for civilian purposes under stringent IAEA inspection. The general assessment in the U.S. has been that it would take only one or two years for Japan to develop nuclear weapon.

Japan also has H-IIA and H-IIB rockets, both of which are equipped with advanced aerospace engineering capabilities which may be potentially applicable for controlling warhead of operational missiles.⁹⁹ The H-IIB launch vehicle is a two-stage rocket using liquid oxygen and liquid hydrogen as propellant and has four strap-on solid rocket boosters powered by polibutadiene. Their satellite launch systems are based on technologies that could be incorporated into a warhead bus theoretically. However, there is no indication to suggest that Japan conducted serious conceptual efforts to explore requirements for developing ballistic missiles. Michael Elleman, a missile expert of Booz Allen Hamilton, pointed out that if Japan were to pursue nuclear force, Japan would more likely opt to employ small, highly mobile cruise missiles rather than ballistic missiles, given Japan's limited geographical size and the strategic need to field a highly survivable nuclear force structure.¹⁰⁰ Reportedly, Japan seems to have made at least a preliminary inquiry about the cruise missile option, but there is no indication for any serious examination subsequently.

Japan does not yet have the basic instruments and infrastructure that would be essential for nuclear weaponry, including a nuclear doctrine, a stringent legal framework to protect classified information, a unified C4I system, nor a unified intelligence system. In addition, Japan's nuclear program is strictly constrained by a web of domestic regulations and laws as well as bilateral and international treaties.

Reportedly, after North Korea launched ballistic missiles in July 2006, a senior Japanese official led an internal assessment of Japan's capability to produce a small nuclear warhead.¹⁰¹ This internal assessment concluded in September 2006 that it would take at least 3 to 5 years for Japan to produce a prototype of small nuclear warhead, with the investment of 200 to 300 billion yen (approximately U.S. \$1.7-2.5 billion, assuming an exchange rate of U.S. \$1= YEN120) and a few to several hundreds of experts and engineers.¹⁰² This surprising revelation was reported in December 2006, two months after the North Korea's nuclear test in October. In fact, however, this examination had been already concluded in September prior to North

⁹⁹ Japan also has the M-V rockets which operate with solid fuel and are capable of placing a 1.8-ton payload into orbit. However, this rocket system has been privatized, and its government funding for research and development has decreased significantly.

¹⁰⁰ Email communication with the author, September 20, 2007.

¹⁰¹ Hideo Tamura "Kaku Danto Shisaku ni 3nen Ijo (More than 3 Years Are Needed to Produce a Prototype of Nuclear Warhead)", *Sankei Shimbun*, December 25, 2006.

¹⁰² Ibid.

Korea's nuclear test. While Prime Minister Abe flatly denied the existence of such examination by the Japanese government, Hideo Tamura, an editorial staff member of Sankei Shinbun and an author of this news article, is confident about the authenticity of this internal government document. According to Tamura, the examination was led by a senior official within the government who was in a position to mobilize necessary resources and whom Tamura knows well personally. Tamura assumes that this examination was possibly made without the knowledge of political leaders, and that the document was probably produced so that bureaucrats could respond promptly if political leaders should question Japan's latent nuclear capability.¹⁰³ The senior official prepared this document preemptively, but to his surprise, no political leader ever asked such a question.

Interestingly, while U.S. experts and officials argue that Japan can produce nuclear weapon using its stockpile of Pu 240, Japanese officials and experts argue that such nuclear weapon may not be credible, given that no nuclear weapon state employs such methodology. A sense of perfection dominates Japan's examination of nuclear weapon production, which contrasts to U.S. concern over Japan's possible interest in crude nukes.

Furthermore, Japan would face additional challenges if it were to pursue a nuclear option. First, given that only a limited amount of domestic reserve of natural uranium exists in Japan, Japan is vulnerable to the embargo of fissile materials. (On the contrary, however, there is also a dissenting view as to whether international community could impose valid economic sanction against nuclear-armed Japan, one of the major economic powers in the world, over an extended period of time, given Japan's significant influence over the global economy. Even the sanctions on India and Pakistan after their nuclear tests in 1998 could not be sustained.¹⁰⁴)

Secondly, Japan's human resource in nuclear realm has eroded for the past decades. Japan's nuclear expert community is already experiencing difficulty in sustaining the civilian nuclear power programs. The university students have perceived nuclear power industry as a declining industry for many years, due to the declining public popularity over the civil nuclear power from safety concern. The emerging concern for climate change may reverse this unpopularity somewhat, but it may take time.¹⁰⁵

Thirdly, the Japanese scientist and academic communities are still deeply held by its pacifism tradition, despite the country's general shift toward the "normal country". A majority of the Japanese universities and academic societies still hold on to the principle of avoiding involvement in military-related research, which has constrained academic experts' interaction with defence officials since the end of the Second World War. There exist few interactions between the defence community and scientific/academic communities in Japan. This is particularly true in realm of nuclear research. If these communities were to work together, first they would have to start from finding a common language, literally. Nuclear weapon is very delicate weaponry which requires integration of various sensitive technologies and mechanics in a synthesized manner. The existence of technological capabilities alone is insufficient. It would require intimate coordination among all relevant stakeholders, including engineers, scientists, and weapon specialists, and a vast amount of *tacit knowledge*

¹⁰³ Author's interview with Hideo Tamura, May 1, 2007, Tokyo, Japan.

¹⁰⁴ Kiyoshi Sugawa, *Beichou Kaisen* (An Outbreak of U.S.-DPRK War) (Kodansha, Tokyo: 2007), pp. 101-109.

¹⁰⁵ Hideo Tamura, "Kaku no Kuuhaku Ge (Absence of Nukes: Part 2)", *Sankei Shinbun*, December 28, 2006.

(that is, nuance or expertise that are hard to be specified in the form of manual) need to be shared among them.¹⁰⁶ Human elements matter.

Lastly, selecting location for nuclear weapon facilities would surely be a painstaking process for the government. Democracy is blooming in Japanese society which barely ceases to criticize the government. In addition, political power of local governments has strengthened considerably the national government, which significantly complicates national government's policies on every front. Even the selection of location for a storage site of radioactive wastes has been stalled over the past decades, because of the strong opposition from local communities nationwide.

Political Assessments

On political assessment, Shinichi Ogawa of the JDA's National Institute of Defense Studies, pointed to the historical fact that Japan's suspicion about the credibility of U.S. extended deterrence was far greater during the Cold War than it is in the 21st century.¹⁰⁷ For example, in May 1969, Mainichi Shimbun conducted a public opinion poll which asked, "Do you think that Japan is protected by U.S. nuclear weapons or not?" Only 35% said "Yes", while 24% said "No." 29% replied that U.S. nuclear weapon would rather endanger Japan's security.¹⁰⁸ In another opinion poll by Mainichi Shimbun in June 1968, only 17% predicted that Japan would never arm itself with nuclear weapons. In another opinion poll by Yomiuri Shimbun in 1969, 32% predicted that Japan would possess nuclear weapons within the next decade.¹⁰⁹ Despite such pessimistic prospects in the 1960s, Japan continued for non-nuclear status. On contrary, several decades later, in Asahi Shimbun's opinion poll in 2005, almost 90% opposed Japan's possession of nuclear weapon.¹¹⁰

Additionally, Professor Mataka Kamiya of Japan's National Defense Academy argued that Japan's decision to go nuclear would only weaken Japan's international status and the reputation it has built over the past decades. Many countries that expressed their support for Japan's bid for a permanent member of the UN Security Council listed Japan's non-nuclear status as one of the primary reasons for their support. Japan's nuclear option would destroy almost all of the political resources. Besides, Japan is already a major economic power in the world, and does not need nuclear weapons to assert its power and prestige.¹¹¹

Furthermore, Japan believes that the credibility of the international non-proliferation regimes is still sufficiently intact, although these regimes face serious challenges in the face of nuclear problems of North Korea and Iran. These regimes are certainly imperfect but are seen to have sufficient legitimacy in the international community. Japan has, as a result, intensified its efforts to strengthen these regimes by complimenting them with various national, bilateral, and multilateral measures for

¹⁰⁶ For example, see, Donald Mackenzie, *Inventing Accuracy* (MIT Press, 1990). For definition and functions of "tacit knowledge", see Ikujiro Nonaka, Kazuo Ichijo and Georg von Krogh, *Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation* (Oxford University Press: 2000).

¹⁰⁷ Shinichi Ogawa, "Seinen shiteiru Nihon no Kakubusou wo meguru Giron ni tsuite [A Perspective on A Revival of US Debate on Japan's Nuclear Armament]," National Institute of Defense Studies, May 9, 2003.

¹⁰⁸ *Mainichi Shimbun*, May 12, 1969, cited in Kurosaki, *Kaku Heiki to Nichibei Kankei*, p. 212.

¹⁰⁹ Kurosaki, *Kaku Heiki to Nichibei Kankei*, p. 279.

¹¹⁰ *Asahi Shimbun*, August 6, 2005, cited in Kurosaki, *Kaku Heiki to Nichibei Kankei*, p. 283.

¹¹¹ Mataka Kamiya, "Nuclear Japan: Oxymoron or Coming Soon?" *The Washington Quarterly* (Winter 2002-2003).

nuclear non-proliferation. Japan assesses that the relative costs associated with non-compliance with the treaties outweigh, and should continue to outweigh, the ones with observing the regimes.

All in all, detailed examinations of Japan's nuclear option have pointed to the conclusion that the relative demerits of Japan's nuclear option would far outweigh the relative merits. However, these conclusions are based on assumptions that U.S. extended deterrence will remain credible. After all, the outcome of Japan's debate on the nuclear option has been, and will continue to be, contingent upon the perceived credibility of U.S. extended deterrence in the future.

Japan's Strategic Posture

In Japan's view, the credibility of deterrence is elastic since reassurance is a political phenomenon eventually.¹¹² Thus, Japan has always made every effort to ensure that U.S. extended deterrence remain credible, and will continue to do so in the future. Over the past decade, Japan has developed a multi-faceted national security posture that incorporates the concepts of assurance, dissuasion, deterrence, denial, defense, damage confinement, and crisis management, which reinforces Japan's non-nuclear position. Especially, Japan has come to place greater weight on its alliance with the United States. Missile defense is at the core of Japan's denial strategy as well as a major tool to institutionalize the alliance.

Furthermore, Japan has been increasingly interested in consultation with the United States on U.S. nuclear doctrine and strategy. During the process of shaping the U.S. Nuclear Posture Review 2010 by the U.S. Barak H. Obama administration, an unprecedented level of consultation took place between the Japanese and the U.S. governments. Then, starting in February 2010, Japan and U.S. formed an official dialogue on deterrence, where exchange of views and information on issues related to deterrence takes place between the two governments. U.S. consultation with Japan about its nuclear posture review has significantly contributed to sustaining Japan's confidence in the credibility of U.S. extended deterrence, according to the Japanese officials.¹¹³

In the current years, Japan has been increasingly concerned about the shifting conventional power balance vis-à-vis China as well as the latter's expanding nuclear forces. As the United States and Russia may pursue nuclear disarmament, there is an emerging concern in Japan that China may find an opportunity to pursue some strategic parity vis-à-vis the United States and Russia in the years ahead. It will become very difficult to achieve a strategic stability in arms control among three nuclear weapon states at a strategic parity.¹¹⁴ Then, how should Japan and the United States engage China in arms control? On this question, there are conflicting views within Japan. Japan recognizes that China already possess sufficient capability to target forward deployed U.S. assets and Japanese territory and some capability to strike U.S. homeland with nuclear weapons. Without constraint, China may significantly improve its capabilities. If U.S. homeland became further vulnerable to Chinese nuclear attack, Japan wonders if the United States would take risks to protect Japan.

¹¹² Cossa, *Chairman's Report, U.S.-Japan Strategic Dialogue*.

¹¹³ A comment by a senior Japanese diplomat in a meeting in Tokyo, Japan, June 3, 2010.

¹¹⁴ The Japanese National Institute for Defense Studies, *East Asian Strategic Outlook 2010* (Japanese version), p. 240.

However, if the United States might pursue an arms control agreement with China, such an agreement might officially recognize China's limited nuclear capability to strike U.S. homeland and sufficient capability to strike Japan. Under such scenario, the purpose of deterrence vis-à-vis China may differ between the United States and Japan: while Japan would want to protect its homeland from Chinese nuclear attack, the United States might tolerate Chinese nuclear capabilities to strike Japan so long as China would not fundamentally challenge U.S. position in Asia. There is a worry that such an agreement could potentially produce decoupling between the U.S. and Japan/Taiwan, especially when China may embrace a theatre deterrence strategy, which would target forward deployed U.S. assets and Japanese territory.¹¹⁵ This will be a genuine dilemma for Japan-U.S. alliance, as some U.S. analyst pointed out.¹¹⁶ If the United States demonstrates restraint towards China, it might not necessarily be seen as reassuring to Japan. On contrary, if China continues an arms race with the United States, it would significantly alarm Japan.¹¹⁷ China's place in nuclear arms control is a critical factor shaping Japan's deterrence posture and confidence in U.S. extended deterrence.

In order to hedge against these scenarios, Japan believes that it is essential to modernize Japan's naval and air powers to recover conventional supremacy at tactical and theatre levels, in addition to all the other conceivable efforts to strengthen Japan-U.S. alliance. In this light, Japan strongly aspired to procure U.S. F-22 fighters, which did not realize due to the U.S. decision to cease production of F-22. After this U.S. decision, Japan has begun to examine the U.S. F-35 fighters as a candidate for its next generation fighters in order to achieve air superiority over the PLA.

Occasionally, there has also been an idea to revise the Three-Non-nuclear Principles to enable introduction of U.S. nuclear weapons onto Japan's soil. In 2003, the Panel to Assess Japanese Foreign Policy, the Japanese Foreign Minister's advisory board, recommended to relax one of the principles that prohibit any entrance of foreign nuclear weapons into Japanese territory, with the purpose to permit U.S. naval assets carrying nuclear weapons to visit Japanese ports. The panel argued that given the fact that the Japanese government had for a long time tacitly permitted the entry of U.S. naval assets with nuclear weapons into Japan, the Three-Non-Nuclear Principles had been in fact "the Two-and-a-Half-Non-Nuclear Principles."¹¹⁸ However, even after the North Korea's nuclear tests in October 2006, a majority of the Japanese public expressed their support for the continuation of the Three-Non-Nuclear Principles.¹¹⁹ This posture has been sustained after North Korea's second nuclear test in May 2009 as well. Also, even from the military perspective, there is a view that U.S. nuclear force may be better protected by being deployed away from Japan, considering Japan's lack of strategic depth. (On the other hand, there is also another view that the presence of U.S. nuclear weapon in Japan may be essential means to

¹¹⁵ Cossa, *Chairman's Report, U.S.-Japan Strategic Dialogue*. Also see, an unpublished paper by Ken Jimbo, "Deterrence and Defense in Japanese Security Policy: Regional Orientation of Extended Deterrence", written in 2007.

¹¹⁶ Author's email communication with Brad Roberts, October 4, 2007.

¹¹⁷ Ibid.

¹¹⁸ "Kaku Tousai Kan no Ichiji Kikou Younin wo, Gaishou no Shimon Kikan [Foreign Minister's Advisory Board Recommended to Permit the Temporary Visits of US Nuclear Ships to Japanese Ports]," *Kyodo News*, September 18, 2003.

¹¹⁹ "Hikaku 3 Gensoku, Kongo mo Mamorubeki 80%...Yomiuri Yoron Chousa (Public Opinion Poll by Yomiuri Shinbun: Over 80% Support to Continue the Three-Non-Nuclear Principles)", *Yomiuri Shimbun*, November 20, 2006.

assure Japan, even if it may not be useful for deterrence.) In any event, there is no enthusiastic domestic support to revise these principles in Japan yet.

Moreover, since the U.S. removed tactical nuclear weapons from its naval vessels in the early 1990s, Japanese government takes the position that there is no longer tactical nuclear weapon on U.S. naval vessels that station at Japanese ports, according to Foreign Minister Katsuya Okada.¹²⁰ In addition, under the INF Agreement, the U.S. no longer possesses the intermediate-range nuclear missiles to deploy in Japan. Unless the INF Treaty is abrogated, there is no nuclear missile that the U.S. deploys to Japan to target China or North Korea. However, Russia currently argues to abrogate this INF Treaty. If this comes true, the issues of Japan's principle that prohibits any entrance of foreign nuclear weapons into Japanese territory could be revisited.

In March 2010, during the Diet session, Foreign Minister Okada indicated the future possibility of granting entry of U.S. nuclear weapons into Japanese port in the event of an emergency where Japan's safety could not be protected without the deployment of U.S. nuclear weapon to Japanese ports."¹²¹ Thus, the Japanese foreign minister has admitted the possibility to change some element of the Three-Non-nuclear Principles. On the other hand, however, the Japanese Prime Minister Naoto Kan pledged to sustain the Three-Non-Nuclear Principles during his visit to Hiroshima in August 2010. Japan may not likely change these Principles anytime soon.

Finally, as noted, ballistic missile defense (BMD) is at the core of Japan's denial strategy and a major tool to institutionalize the alliance. The BMD's immediate objective is to defeat incoming medium-range ballistic missiles from North Korea. Japan's BMD system consists of Aegis destroyers to intercept ballistic missiles at the mid-course phase, Patriot PAC-3 to intercept ballistic missiles at the terminal phase, the sensor systems to detect and track ballistic missiles, and the command, control, battle management and communications systems.¹²² Japan's BMD architecture consists of 4 Aegis destroyers with added BMD capability, 16 Patriot PAC-3 Fire Units, 4 FPS-5 radars and 7 FPS-3 upgraded radars through command, control, battle management and communications systems. Also, Japan has cooperated with the United States to improve BMD capabilities against an adversary's use of decoys and diversified BM flight trajectories as well as to expand the protection areas. The BMD is expected to complicate an adversary's strategic calculation about the probability of a successful attack on Japanese targets, thereby creating uncertainty regarding the relative merits of launching such a missile toward Japan. This is expected to strengthen deterrence further.

Conclusion

As Dr. Lawrence Freedman, a British strategist once observed: "acquiring nuclear capability is a statement of a lack of confidence in all alternative security

¹²⁰ Michito Tsuruoka, "Perspective on the NPR Vol. 2," Commentary, the National Institute of Defense Studies, May 24, 2010.

¹²¹ Remarks by Katsuya Okada, Foreign Minister, at a session of the Foreign Affairs Committee, Lower House, the Diet, on March 17, 2010, cited in Michito Tsuruoka, "Perspective on the NPR Vol. 2," Commentary, the National Institute of Defense Studies, May 24, 2010.

¹²² Japanese Ministry of Defense, *Defense of Japan 2009*, p. 184. http://www.mod.go.jp/e/publ/w_paper/pdf/2009/28Part3_Chapter1_Sec2.pdf, accessed on May 9, 2010.

arrangements.”¹²³ Put in the context of Japan’s national security, Japan has so far retained faith in “alternative security arrangements” that are anchored on the Japan-U.S. security relationship. In the past, the process of the development of the Japan-U.S. alliance has demonstrated at least one consistent pattern: namely, every time Japan debated new security arrangements at a time of strategic shift in the environment, Japan always chose pragmatic arrangement. Through careful calculation of relative costs and merits associated with each option, Japan eventually adopted new security measures within the renewed framework of the Japan-U.S. alliance. As Victor Cha of Georgetown University observed, “[a]s long as U.S. commitments remain firm, the likelihood of Japan seeking alternative internal or external balancing options is low. In other words, the causal arrow is more likely to run in the direction from weakened U.S. alliance to alternative balancing options, rather than from alternative balancing options to weakened U.S. alliance.”¹²⁴

After all, Japan’s discussion of its nuclear option should not be necessarily regarded as a deplorable or alarming phenomenon. Certainly, some extreme opinions that support Japan’s possession of indigenous nuclear weapons might seem shocking in the initial phase of such discussions. However, as many political leaders, officials and experts join such discussions, more pragmatic perspectives begin to shape these discussions, which helps the Japanese public understand the costs and benefits of the nuclear option and shapes their view of what option is in the best national interests of Japan. As Brad Glosserman, the director of research at the Pacific forum CSIS, observed, such scrutiny should be seen as rather *healthy*. Indeed, as Glosserman argued, “Japan’s study of every security option is essential to a real national security debate. Like North Korea, Japan needs to know that possessing nuclear weapons won’t enhance its security. In the past, it was a given; today, it must be proven.”¹²⁵ In the past, certainly, such pragmatic discussions have led Japan to pursue a more deliberate consideration of national interests, and to Japan’s holding on to a sound national security strategy.

In this sense, Japan’s discussion of nuclear option per se should not be seen as undermining the security and stability of Asia. Rather, it is a prerequisite, in a way, to foster healthy discussion over security policy in Japan, to strengthen the Japan-U.S. alliance, and to prepare for new security challenges in evolving strategic environment in this region.

Bibliography

- Akira Kurosaki, *Kaku Heiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations)
Asahi Shimbun, October 29, 1976.
- Aso, Taro. 2007. *Jiyu to Hanei no Ko* (Arc of Freedom and Prosperity: Japan’s Expanding Diplomatic Horizons). Tokyo: Gentosha.
- Campbell, Kurt M. and Sunohara, Tsuyoshi. 2004. “Japan: Thinking the Unthinkable”. In *The Nuclear Tipping Point*, edited by Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss. Washington, D.C.: Brookings Institution Press.

¹²³ Lawrence Freedman, “Great Powers, Vital Interests and Nuclear Weapons,” *Survival* (Winter 1994/1995), p. 36.

¹²⁴ Victor D. Cha, “Defensive Realism and Japan’s Approach toward Korean Reunification,” *NBR Analysis* Vol. 14, No. 1 (June 2003), pp. 9-10.

¹²⁵ Brad Glosserman, “Nukes still won’t help Japan,” *The Japan Times*, August 7, 2003.

- Cha, Victor D. June 2003. "Defensive Realism and Japan's Approach toward Korean Reunification," *NBR Analysis*. 14 (1): 9-10.
- Cossa, Ralph A. "Chairman's Report, U.S.-Japan Strategic Dialogue". Feb. 25-26, 2008. Maui: Hawaii, Pacific Forum CSIS.
- Freedman, Lawrence. 1994/95 "Great Powers, Vital Interests and Nuclear Weapons," *Survival* 36 (4): 35-52.
- Furukawa, Katsuhisa. 2003. "Making Sense of Japan's Nuclear Policy: Arms Control, Extended Deterrence, and the Nuclear Option". In *Japan's Nuclear Option: Security, Politics, and Policy in the 21st Century*, edited by Benjamin Self. Washington D.C.: The Henry L. Stimson Center.
- Glosserman, Brad. "Nukes still won't help Japan," *The Japan Times*, August 7, 2003.
- Green Michael J. and Furukawa, Katsuhisa. 2008. "Japan: New Nuclear Realism". In *The Long Shadow: Nuclear Weapons and Security in the 21st Century*, edited by Muthiah Alagappa. Stanford: Stanford University Press, California.
- Hayes, Peter et al. 1986. *American Lake, Nuclear Peril in the Pacific*. New York: Penguin Books
- Hideo Tamura, "Kaku no Kuuhaku Ge (Absence of Nukes: Part 2)", *Sankei Shinbun*, December 28, 2006.
- Hyodo, Nisohachi. 2006. "'Nihon Kaku Busou' no Gutaiteki Sukeju-ru (A Concrete Schedule of Japan's Nuclear Armament)". In 'Nihon Kaku Busou' no Ronten (Issues of Japan's Nuclear Armament), edited by Terumasa Nakanishi. Tokyo: PHP Publishing Co.
- Ito, Masaya. 1985. *Ikeda Hayato to Sono Jidai (Hayato Ikeda and the Epoch)*. Tokyo: Asahi Shimbunsha.
- Itoh, Kan, "No toha Iwanai Amerika [America Would Not Say 'No' to Japan's Nuclear Armament]". *Shokun!* August 2003.
- Izumi, Hajime and Furukawa, Katsuhisa. 2007. "Not Going Nuclear: Japan's Response to North Korea's Nuclear Test", *Arms Control Today*, June.
- Izumi, Hajime and Furukawa, Katsuhisa, "Not Going Nuclear: Japan's Response to North Korea's Nuclear Test", *Arms Control Today*, June 2007.
- Japanese Ministry of Defence, *Defence of Japan 2009*, p. 184. http://www.mod.go.jp/e/publ/w_paper/pdf/2009/28Part3_Chapter1_Sec2.pdf, (accessed on May 9, 2010).
- Kamiya, Mataka, 2002-2003. "Nuclear Japan: Oxymoron or Coming Soon?" *The Washington Quarterly* 26 (1): 63-75.
- Kase, Miki. 1999. *Daitouryou ate Nihonkoku Shushou no Gokuhi Fairu (Secret Files for the US Presidents Concerning the Japanese Prime Ministers)*. Tokyo Mainichi Shimbunsha
- Katsuhisa Furukawa, "Chapter 2: Conditions for Japan's Nuclear Option", In *WMD 2020*, edited by James Wertz. Stanford: Stanford University Press (forthcoming).
- Kessan Iinkai Kaigiroku Daigogou (The Record of the Meeting of the Committee on the Settlement of Account, No. 5)*, 30 March 1981.
- Kitaoka, Shinichi. 2010. "Anzen Hoshou no Taibei Izon ga Umidashita 'Mitsuyaku' no Jitsuzo (The Reality of 'Japan-U.S. Secret Agreement' That Was Produced as a Result of Japan's Dependence on the United States for National Security Affairs)", *Chuo Koron*, May.
- Kurosaki, Akira, 2006. *Kaku Heiki to Nichibei Kankei (Nuclear Weapons and Japan-US Relations)*. Tokyo: Yushisha.

- Kurosaki, Akira. 2006 *Kaku Heiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations). Tokyo: Yushisha.
- Kurosaki, Akira. 2006. *Kakuheiki to Nichibei Kankei* (Nuclear Weapons and Japan-US Relations). Tokyo: Yushisha,
- Mainichi Shimbun Shakaibu. Ed. 2006. *Usagi no Mimi to Hato no Yume: Nihon no Kaku to Jouhou Senryaku* (Rabbit's Ear and Dove's Dream: Japan's Nuclear and Information Strategy). Tokyo: Liberta Shuppan.
- Memcon, Ikead and Rusk, November 3, 1961, FRUS 1961-1963, Vol. 22, Northeast Asia, 1996,
- Michishita, Narushige. August 2006. "Kaku Mondai ni kansuru Nihon no Ugoki (Japan's Actions regarding Nuclear Problems)," A briefing material produced as a course material of Michishita's class at the Graduate Research institute of Policy Studies in Tokyo, Japan.
- Nakanishi, Terumasa. "Nihonkoku Kakubushou heno Ketsudan [Decision to Arm Japan with Nuclear Weapons]". *Shokun!*, August 2003
- Nakanishi, Terumasa. Ed. 2006. 'Nihon Kaku Busou' no Ronten (Issues of Japan's Nuclear Armament). Tokyo: PHP Publishing Co.¹
- Nakasone, Yasuhiro. 2004. *Jiseiroku* (Record of Reflection). Tokyo: Shinchosha.
- Nakata, Hiroko. "Kyuma exits over A-bomb gaffe", *The Japan Times*, July 4, 2007.
- National Intelligence Estimate, NIE 4-3-61, "Nuclear Weapons and Delivery Capabilities of Free World Countries Other than the US and UK," September 21, 1961, Secret, Excised copy, (Source: microfiche supplement to U.S. Department of State, *Foreign Relations of the United States, 1961-1963, Volume VII, Arms Control and Disarmament*. Washington, D.C., U.S. Government Printing Office, 1997.
- National Security Archive, "National Intelligence Estimates of the Nuclear Proliferation Problem The First Ten Years, 1957-1967", National Security Archive Electronic Briefing Book No. 155, June 1, 2005, Washington D.C.
- Nonaka, Ikujiro; Ichijo, Kazuo and von Krogh, Georg. 2000. *Enabling Knowledge Creation: How to Unlock the Mystery of Tacit Knowledge and Release the Power of Innovation* Oxford: Oxford University Press: 2000.
- Norris, Arkin, and Burr, "Where They Were", 30-31; Ministry of Foreign Affairs, *Iwayuru 'Mitsuyaku' Mondai ni kansuru Yuushikisha Inkai Houkokusho* (A Report by the Expert Committee on the So-Called "Japan-U.S. Secret Agreement"), 9 March 2010.
- Norris, Robert S., Arkin, William M., and Burr, William, "Where They Were", *The Bulletin of the Atomic Scientists*, November/December 1999.
- Okazaki, Hisahiko. "Mazu Gijutsutekina Men wo Tsumeyo [First, We Needs to Examine the Technical Feasibility of Nuclear Option]". *Shokun!* August 2003.
- Roberts, Brad. E-mail Communication. October 4, 2007.
- Shinichi Ogawa, "Seinen shiteiru Nihon no Kakubusou wo meguru Giron ni tsuite [A Perspective on A Revival of US Debate on Japan's Nuclear Armament]," National Institute of Defense Studies, May 9, 2003.
- Sugawa, Kiyoshi. 2007. *Beichou Kaisen* (Outbreak of U.S.-DPRK War). Tokyo: Kodansha.
- Sugawa, Kiyoshi. 2007. *Beichou Kaisen* (Outbreak of U.S.-DPRK War). Tokyo: Kodansha
- Sugita, Hiroki. 2005. *Kenshou Hikaku no Sentaku* (Reviewing Japan's Decision to Pursue Non-Nuclear Weapon State). Tokyo: Iwanami Shoten.

- Takuya Kubo, "Boueiryoku Seibi no Kangaekata (A Framework to Consider the Arrangement of Japan's Defense Capabilities)", February 20, 1971, <http://www.ioc.u-tokyo.ac.jp/~worldjpn/documents/texts/JPSC/19710220.O1J.html>, (accessed 30 April 2008).
- Tamura, Hideo . Interview. May 1, 2007, Tokyo, Japan.
- Tamura, Hideo. "Kaku Danto Shisaku ni 3nen Ijo (More than 3 Years Are Needed to Produce a Prototype of Nuclear Warhead)", *Sankei Shimbun*, December 25, 2006.
- Tanaka, Akihiko. 1997. *Anzen Hoshou* (National Security). Tokyo: Yomiuri Shimbunsha,
- Tsuruoka, Michito, "Perspective on the NPR Vol. 2," Commentary, the National Institute of Defense Studies, May 24, 2010.
- U.S. planned atomic attacks from Japan", *The Japan Times*, May 9, 2000.
- Wakaizumi, Kei 1994. *Tasaku Nakarishi wo Shinzemu to Hossu* (Believing that There Was No Other Option Available). Tokyo: Bungei Shunju
- Wakatsuki, H. 2006. *Zenhoui Gaikou no Jidai*; and Shingo Nakajima, *Sengo Nihon no Bouei Seisaku* (Japan's Defense Policy After the Second World War). Tokyo: Keio University Press.
- Wakatsuki, Hidekazu. 2006. *Zenhoui Gaikou no Jidai* (An Era of Multi-Direction Diplomacy) Tokyo: Nihon Keizai Hyoronsha.
- Weinstein, Martin E.. 1971. *Japan's Postwar Defense Policy, 1947-1968*. Columbia: Columbia University Press:
- "Nuclear Weapons Production in Fourth Countries - Likelihood and Consequences," June 18, 1957, in the National Security Archive, "National Intelligence Estimates of the Nuclear Proliferation Problem The First Ten Years, 1957-1967", National Security Archive Electronic Briefing Book No. 155, June 1, 2005, <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB155/index.htm>,(accessed 30 May 2008).
- "Gist of White Paper on Defense", *Japan Times*, October 1970,
- "Hikaku 3 Gensoku ha Nansensu [The Three Non-nuclear Principles Are Nonsense]," *Kyodo News*, June 10, 2000.
- "Hikaku 3 Gensoku, Kongo mo Mamorubeki 80%...Yomiuri Yoron Chousa (Public Opinion Poll by Yomiuri Shinbun: Over 80% Support to Continue the Three-Non-Nuclear Principles)", *Yomiuri Shimbun*, November 20, 2006.
- "Hikaku Power: Haibokushugi Tsuranuki Ginen Harae [Non-nuclear Power: Sustain 'Defeatism' and Expel Skepticism of Other Countries]," *Asahi Shimbun*, August 4, 1999.
- "Kaku Tousai Kan no Ichiji Kikou Younin wo, Gaishou no Shimon Kikan [Foreign Minister's Advisory Board Recommended to Permit the Temporary Visits of US Nuclear Ships to Japanese Ports]," *Kyodo News*, September 18, 2003.
- "Kaku wo Ou, Kenshou Nihon no Seisaku: Jou: Nihon 'Hikaku' ni Jirenma (Tracking the Nukes: Reviewing Japan's Policy, Part I. Japan's Non-Nuclear Posture Faced with Dilemma)", *Asahi Shimbun*, August 1, 2007.
- "Kaku wo Ou, Kenshou Nihon no Seisaku: Jou: Nihon 'Hikaku' ni Jirenma (Tracking the Nukes: Reviewing Japan's Policy, Part I. Japan's Non-Nuclear Posture Faced with Dilemma)", *Asahi Shimbun*, August 1, 2007.
- "Kakubuso Kano daga Motenu [Nuclear Armament Technically Possible, but Not Recommendable]," *Asahi Shimbun*, November 13, 1994.

“Seikai Gekishin, Abe Shinzo Kanbou Fukuchoukan ga Katatta Monosugoi Nakami, Kaku Heiki no Shiyou ha Iken deha nai (Political World Shaken Severely by the Remarks of Deputy Cabinet Secretary Shinzo Abe: the Use of Nuclear Weapon Would Not Violate Japan’s Constitution)”, *Sunday Mainichi*, June 2, 2002.