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**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

TESTING THE NUCLEAR WILL OF JAPAN

by

David A. Backer

December 2007

Thesis Advisor:
Second Reader:

James C. Moltz
Edward A. Olsen

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TESTING THE NUCLEAR WILL OF JAPAN

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Lieutenant, United States Navy
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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS IN NATIONAL SECURITY AFFAIRS

from the

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ABSTRACT

Increasing instability in the Northeast Asian region, decreasing faith in the U.S.-Japan security alliance, and the growing Chinese presence in the Northeast Asian region have caused Japanese politicians to revisit an issue that has been discussed three times in their history. The current issue is that, based on the above factors, Japan is once again considering whether or not the advantages of becoming a nuclear power outweigh the advantages of remaining a non-nuclear state.

The purpose of this thesis is to analyze Japan's previous attempts to develop a nuclear weapons program, looking at the political, economic/technological, and social factors that each time produced a non-nuclear state. The intention of the historical analysis is to provide a comprehensive understanding of how and why such critical factors led Japan to abstain from developing a nuclear weapons program. Additionally, the historical analysis will help determine the conditions that will likely drive current and future policy makers and leaders as they are faced with new incentives to develop nuclear weapons and, more importantly, suggest methods through which the United States and the international community can help ensure that Japan will continue to remain on a non-nuclear-weapons course.

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I. THE NUCLEAR WILL OF JAPAN

A. PURPOSE

Increasing instability in the Northeast Asian region, decreasing faith in the U.S.-Japan security alliance, and the growing Chinese presence in the Northeast Asian region have caused Japanese politicians to revisit an issue that has been discussed three previous times in their history. The current issue is that, based on the above factors, Japan once again is considering whether or not the advantages of becoming a nuclear power outweigh the advantages of remaining a non-nuclear state. Affecting Japanese leaders in this decision is the historical precedent established from the three previous occasions when Japan considered developing and rejected a nuclear weapons program.¹ The decision that Japanese politicians make today will not only affect Japan, but will also have a significant impact on the region and the international community.

Do the decisions made in the past apply to the situation that Japan faces today? Japanese politicians such as the former Foreign Minister Taro Aso reject this linkage, saying that past policies that led to the establishment of a nuclear-weapons-free Japan are no longer relevant. Their argument is based on a number of factors that by themselves would not necessarily propel Japan into the nuclear weapons club, but together fuel current debates.² However, other Japanese leaders do not agree with former Minister Aso and argue that the established security partnership provided by the U.S.-Japanese security alliance sufficiently addresses a growing Chinese presence in the region and instability from North Korea. Additionally, those that speak out against the former Foreign Minister argue that the U.S.-Japanese security relationship ensures that Japan continues to affirm

¹ The historical precedents come in the form of a constitution that prohibits the creation of a nuclear weapons program, security treaties made with the United States, and the participation in such organizations as the Non-Proliferation Treaty (NPT).

² The following five factors fuel current debates: (1) Japan now possesses the economic and technological capability to develop its own nuclear weapons program; (2) the current U.S.-Japanese strategic arrangement – the nuclear umbrella – has holes; (3) nuclear weapons would provide Tokyo with the tools necessary to become a global superpower; (4) China’s increasing global influence; and (5) nuclear instability within the region.

its position within the international community politically and economically.³ Will the decisions that have prevented Japan from developing a nuclear weapons program in past form the policies for continued abstinence in the future? Or will Japan set a new precedent as it attempts to deal with these issues on a level that is commensurate with its economic and political position within the international community and the emerging threats it faces?

The purpose of this thesis is to analyze Japan's current nuclear debate in the context of previous attempts to develop a nuclear weapons program, looking at the political, economic/technological, and social factors that determined why and how certain critical factors led to the rejection of the nuclear option and how these issues fit into today's policy deliberations. Some of the contributing factors that led Japan down the non-nuclear road in the past were: the creation of a constitution that prohibited the development of an offensive military program; state goals focusing on rapid economic industrialization; and the establishment of a relationship that promoted the achievement of these goals. The argument of this thesis is that the incentives to develop a nuclear weapons program today do not outweigh the disincentives that would result in pursuing said action. Therefore, despite new pressures, Japan's future policies are likely to continue to be shaped by decisions that have been made in the past and the debates of today will not produce a nuclear Japan for tomorrow. Similar to its previous attempts, Japan's quest for a nuclear weapons program carries with it too many consequences and will only exacerbate the issues that drive the debates calling for change.

In order to support the argument, this thesis first provides a historical analysis of the three previous times Japan considered developing nuclear weapons. These periods were: (1) the mid-1960's, following the Chinese nuclear test; (2) the mid-1970's, following Japan's ratification of the Non-Proliferation Treaty (NPT); and (3) the mid-1990's, following Japan's agreement to of the indefinite extension to the NPT. The intention of the historical analysis is to provide a comprehensive understanding of the critical factors that led Japan to abstain from developing a nuclear weapons program.

³ *Daily Summary of Japanese Press*. Office of Translation and Media Analysis. 05 December 2006. These four issues have been argued by such senior officials as former Foreign Minister Taro Aso in an interview translated in the Office of Translation and Media Analysis.

Additionally, the historical analysis will help determine what will likely drive current policy makers and leaders as they are faced with new incentives to develop nuclear weapons and more importantly, help suggest methods through which the United States and the international community can ensure that Japan will abstain from developing nuclear weapons.

B. RECENT BACKGROUND

In July of 2006, North Korea launched three Taepodong-2 missiles, two of which landed just short of Northwest Japan.⁴ This missile launch concluded a six-hour test that caused the international community to question the security and stability of the Far East region. Not only did Asian regional leaders condemn the testing, but they commenced a series of talks and negotiations aimed at ensuring it did not happen again. More importantly, the debate over whether or not Japan's current security alliances and defenses were adequate against renewed North Korean instability resurfaced. As a result, the possibility for the development of nuclear weapons seems more real today than it ever has in the past. However, unlike in the past, Japan now possesses large stocks of civilian plutonium and new reprocessing facilities that could be used to support such efforts.

In order to help understand what fuels the current debates, one must also understand the theoretical reasons that might propel Japan to develop nuclear weapons. Scholars have addressed these questions from the perspective of four conceptual paradigms—neo-realism, classical realism, neo-liberalism, and constructivism. The importance of looking at these paradigms is partly because they can help explain why Japan failed to develop nuclear weapons in the past. But more importantly, for the purposes of this thesis, some of the paradigms possess predictive power that could assist policy makers in determining what Japan might do in the future.

1. Neo-realism

Neo-realism is the theoretical perspective employed by its originator Kenneth Waltz and by John Mearsheimer to explain how states were likely to try to ensure their

security as the world transitioned from the bipolar system of the Cold War to a new multipolar structure.⁵ Both argued that once the Cold War was over, the spheres of influence that the United States and the Soviet Union presided over would eventually erode and the states ruled inside those spheres could eventually become independent, multilateral players.⁶ Because Japan had become an integral member of the international community, it would feel compelled to create a military force to complement and maintain its economic and political standing. This would by necessity include nuclear weapons.

Another neo-realist, Chris Layne, argued that the end of the Cold War would produce a unipolar structure where the United States was the hegemonic state.⁷ In this world, Japan would only be allowed to re-militarize or create a nuclear weapons program if the United States allowed it. This theory is based on Waltz's notion that states will bandwagon with existing powers to ensure their survival.⁸ The correlation for Layne resides in the fact Japan remains attached to the United States following the post-Cold War period. The U.S.-Japan security treaty and its ability to provide Japan with continued security and safety should prevent Japanese leaders from developing nuclear weapons despite a changed international structure, at least as long as unipolarity lasts. However, Layne's predictions are less sanguine about Japan's non-nuclear status should conditions of multipolarity emerge.

⁴ "Press Briefing on North Korea Missile Launch," *The Whitehouse.gov*, 04 July 2006, <http://www.whitehouse.gov/news/releases/2006/07/20060704-1.html> (accessed 18 October 2007).

⁵ John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W. W. Norton, 2001), 156-7.

⁶ Bruce M. Russett, Thomas Risse-Kappen, and John J. Mearsheimer, "Back to the Future, Part III: Realism and the Realities of European Security," *International Security* 15, no. 3 (Winter, 1990-1991): 216.

⁷ "The Unipolar Illusion Revisited: The Coming of the United States' Unipolar Moment," Layne, Christopher. *Project Muse: Scholarly Journals Online*, 2006, http://muse.jhu.edu/journals/international_security/v031/31.2layne.html (accessed: 18 October 2007).

⁸ Kenneth N. Waltz, *Theory of International Politics* (New York: Random House, 1979), 128.

2. Classical-realism

Classical realism assumes that states are unitary actors that seek to maximize their power in order to survive in an anarchical international system.⁹ If the rivals in the international system are developing nuclear weapons, the states facing this external pressure are likely to do the same. Additional factors that would propel Japan towards the development of a nuclear weapons program according to this framework are: (1) the quest for normalcy; (2) the breakdown of the U.S.-Japan security alliance; (3) fear of the increasing Chinese political, social, economic, and military presence in the region; and (4) a reaction to the missile developments and atomic bomb test by North Korea.¹⁰

Supporters of these arguments believe that nuclear weapons are essential for the continued protection of Japan's vital interests, which in turn will ensure their survival. However, classical realism fails to take into account the domestic political, social, and economic influences on the Japanese decision-making apparatus. But it has been the intricate relationship between these three domestic factors that has prevented Japan from developing nuclear weapons in the past and will likely continue to prevent Japan from developing them in the future.

The 1951 Security Treaty and then the 1960 Treaty of Mutual Cooperation and Security between the United States and Japan have provided security since the end of the occupation to present. Since the end of the occupation, Japan has evolved into a global economic force. Even though it eventually possessed the ability to develop nuclear weapons it decided not to because Tokyo thought it better to continue to develop Japan's economy. If Japan were to develop nuclear weapons, the fear was that it would damage trade relations with more powerful countries that did not want to see a nuclear Japan.¹¹

⁹ Alexander Wendt, "Constructing International Politics," *International Security* 20, no. 1 (Summer 1995): 72.

¹⁰ *Sentaku Shuppan*. United States Embassy, Tokyo. *Daily Summary of Japanese Press*. Office of Translation and Media Analysis. 05 December 2006. These four issues have been argued by such senior officials as Foreign Minister Taro Aso in an interview translated in *Sentaku Shuppan* newspaper.

¹¹ The concerns extend beyond the fear of jeopardizing trade relations. For example, Japan's relationship within the NPT was also a concern. Membership within the NPT increases stable relations with China and maintains stable relations with the United States. NPT membership also provides Japan with access to materials and technology needed to fuel their civilian nuclear power program.

Instead of diverting funds that would benefit economic advancement of the state and risk ruining international relationships, Japan continued to depend on the United States for security. Although Japan currently possesses the economic and technological means to develop and deploy nuclear weapons, political majorities continue to support a defense policy based on the current U.S.-Japanese security relationship.

3. Neo-liberalism

Neo-liberalism posits that the economic and political interests of the state influence the behavior and outcome of a situation; therefore, the interest of a state is to establish and maintain stable relations with the international community.¹² A state establishes stability by cooperating with core states because the costs of defection/conflict are too great. Glenn Chafetz claims these alignments are achieved by the relationship between core states and the periphery states (or smaller states) because of the quest for individual state security. Core states are led by democracies that bond with other core states and operate under established norms and values. The periphery or smaller states then accept the established norms and values because they guarantee their national security and promote their prosperity. He explains that states that are part of this relationship provide a more secure environment because states are able to achieve their interests through international cooperation, in lieu of an arms race.¹³

Additionally, neo-liberals argue that the economic and political costs are too great to develop a nuclear weapons program to deter regional threats. This is because such a program would undermine the norms and values established and directed by international institutions like the NPT and the U.N. and make the state an international pariah. Similarly, Yan Xuetong, the deputy head of the Institute of International Studies at Tsinghua University, described future Japanese Prime Minister Fukuda as a neo-liberal

¹² Robert O. Keohane and Joseph S. Nye, *Power and Interdependence* (New York: Harper Collins Publishers, 1989), 5.

¹³ Tanya Ogilvie-White, "Is There a Theory of Nuclear Proliferation? An Analysis of the Contemporary Debate," *The Nonproliferation Review* (Fall 1996): 49. Core states are described as those states that maintain power and influence over another state. The United States is an example of a core state. This argument is somewhat similar to Waltz's bandwagoning theory, already discussed in this chapter. Chafetz's position is assessed in

for solving the country's problems through the negotiation of established laws and treaties.¹⁴ However, the NPT, and its inability to actually control non-proliferation within the international community causes much concern amongst Japanese elites.¹⁵

Examples of the NPT's failure to control states from developing nuclear programs are India and Pakistan. India and Pakistan have been permitted to possess nuclear weapons programs without having to sign the NPT because of their relationship with the United States. On the other hand, Iran continues to develop its program in spite of threats from the non-proliferation regime. Regionally, and of particular concern to Japan, has been North Korea's unwillingness since 2003 to remain a partner of the NPT and cease its development of a nuclear weapons program. Therefore, Japan's decreasing faith in the NPT is caused by the preferential treatment towards aspiring nuclear states. Additionally, Japan has decreasing faith in the NPT's inability to prevent or eliminate aspiring or established nuclear weapons programs.

It is under these circumstances that neo-liberal Japanese decision makers might consider the development of a nuclear weapons program. As their faith in the non-proliferation regime decreases, so too does their faith in the members that are a part of it, specifically the United States. If the NPT's greatest superpower does not fully support the regime, then why should Japan? Japan signed onto the NPT with only five nuclear weapons states, not six, seven, or eight.¹⁶

4. Constructivism

Constructivism focuses on how a state's interests and behavior are influenced by its identity and perceived place in the international community as developed and affected

¹⁴ "Japan's Parliament Elects Fukuda Prime Minister," *The China Daily*, 26 September 2007, http://www.lexisnexis.com:80/us/lacademic/results/docview/docview.do?risb=21_T2257768053&format=GNBFI&sort=RELEVANCE&startDocNo=1&resultsUrlKey=29_T2257768056&cisb=22_T2257768055&treeMax=true&treeWidth=0&csi=227171&docNo=2 (accessed 12 October 2007).

¹⁵ Asahi Shimbun Company. United States Embassy, Tokyo. *Daily Summary of Japanese Press*. Office of Translation and Media Analysis. 05 November 2006.

¹⁶ Maria Rost Rublee, "Persuasion, Social Conformity, and Identification: Constructivist Explanations for Non-Nuclear States in a Nuclear World," PhD. dissertation. Columbian College of Arts and Sciences of The George Washington University, 2004, 115.

by its interactions with other states.¹⁷ The interests of the states are therefore influenced by both its self-image and by “internationally held norms and understandings about what is good or appropriate.”¹⁸ These international norms are defined as those identities, interests, and social realities and expectations that bound the rational interactions among the states in the international community.¹⁹

The constructivist theoretical approach focuses on two arguments. The first pertains to the identity of the Japanese people. Japan has been the only society to experience and live through the effects of a nuclear weapons attack. Because of this fact, Japanese society has developed an anti-nuclear sentiment in hopes of preventing the same tragedy from occurring again. The strength of this sentiment stems from a Japanese political apparatus that continues to assimilate the emotional factors of its society into policy by choice.²⁰ The strength of the Japanese identity is that it has strayed little in the past sixty years and, despite the external and internal influences that prompt change, it will unlikely change in the near future.

But the second policy debate contained within the constructivist theory argues that the international community is full of uncertainty and is always changing—that norms are not always constant. Additionally, the norms that bind actors are not always relevant to evolving situations; therefore, it is only natural that states’ definitions of interests may evolve to adapt to changing environment. This side argues that the international community has slowly changed to accept nuclear weapons and that this changing attitude has the potential to change established norms.²¹ This argument is

¹⁷ Martha Finnemore, *National Interest in International Society* (New York: Cornell University Press, 1996), 3.

¹⁸ Finnemore, 2.

¹⁹ Peter J. Katzenstein, ed., *The Culture of National Security: Norms and Identity in World Politics* (New York: Columbia University Press, 1996), 28.

²⁰ Andrew L. Oros, “Godzilla’s Return: The New Nuclear Politics in an Unsecure Japan,” Benjamin L. Self and Jeffery W. Thompson, eds. *Japan’s Nuclear Option: Security, Politics, and Policy in the 21st Century* Washington, D.C.: The Henry L. Stimson Center, 2003, 5.

²¹ Sharon Squassoni, *India’s Nuclear Separation Plan: Issues and Views*. Washington DC: CRS Report for Congress, 2006, CRS, RL33292, 17.

supported by the international community's inability to prevent such countries as Israel, India, Pakistan, and North Korea from developing nuclear weapons.²²

C. SIGNIFICANCE OF THE DEBATES

As this thesis will show, a main factor that prevented Japan from developing nuclear weapons was its lack of motivation. However, the new debate raises serious concerns throughout the international community because Japan now possesses the technological, economic and material means to develop its own nuclear weapons program. More importantly, the current debate shows that a large part of the Japanese political and social structure displays the motivation to prompt change. This is evident as the Japanese are now discussing a change to Article Nine of their constitution to allow for their Self-Defense Forces to take a more proactive role throughout the region.²³ In the past, the nuclear taboo preventing these discussions from occurring so openly—perhaps the nuclear taboo is now fading away.

D. METHODOLOGY

The three specific time periods of 1960-1965, 1970-1976, and 1993-2007 were chosen because they covered the instances when Japan has been faced with the same question—whether or not to develop nuclear weapons. Although the first two time periods produced a non-nuclear Japan, the reasons leading to each respective decision were not always dictated by the same set of factors. However, the issues fueling today's debate revisit many of the factors that influenced policy makers in the past, but today there are some significant differences. The biggest difference is that, in the past, Japan lacked the technological, economical, political, or social motivation. Not only does Japan

²² Although Iran has yet to attain nuclear weapons, the international community has yet to effectively prevent Iran from continuing to develop them. Additionally, the international community has also shown favor in who it accepts as a nuclear power. For example, the recent nuclear agreement between the United States and India has placed India in the favor of the international community despite not being a member of the NPT.

²³ "North Korea Assails Japan Over "Threat" in Defense White Paper," *British Broadcasting Corporation*, 16 August 2006
http://www.lexisnexis.com:80/us/lncademic/results/docview/docview.do?risb=21_T2256777658&format=GNBFI&sort=RELEVANCE&startDocNo=1&resultsUrlKey=29_T2256777661&cisb=22_T2256777660&treeMax=true&treeWidth=0&csi=10962&docNo=2 (accessed 01 February 2007).

currently possess the technological and economic means to develop a nuclear weapons program, but the political debates are more open to consideration of nuclear weapons from within their own society and find greater support in the international environment today than ever before.

E. ROADMAP

The current debate does not focus on whether or not Japan possesses the capability to develop nuclear weapons; instead, the debate centers on whether or not the will of the people will influence political leaders in the face of a threatening security environment. Chapters II through IV will analyze three case studies and specifically determine what political, economic/technological, and social factors persuaded, or might today persuade, Japanese leaders to refrain from developing a nuclear weapons program.

Chapter II will analyze the period from 1960 to 1965. The beginning of this case study will discuss Japan's pre-World War II attempt to develop nuclear weapons. This initial attempt proved that Japan was capable of developing nuclear weapons and provided the fuel for future debates. The rest of the chapter concentrates on the how the United States accepted responsibility for the security of Japan. The middle stages of this period saw the initial shift of Japanese security and defense towards total reliance on the United States. The document signifying this event was the signing of the San Francisco Peace Treaty of 1951. However, it was the signing of the 1961 Treaty of Mutual Cooperation and Security that reaffirmed Japan's submission to the United States for security issues and the Japan's commitment instead to economic development. The period culminated with the Chinese atomic bomb test in 1964.

Chapter III analyzes the period from 1970 to 1976. During this period, Japan faced two sub-phases when it considered developing nuclear weapons. The first instance came after China detonated its first nuclear bomb in 1964. The explosion sent shock waves through the Japanese political and social arenas while placing China on the international stage. The second instance came when Japan was to sign the NPT in 1970. The effects of the Chinese nuclear bomb were evident, as the Japanese were hesitant to surrender their rights to develop their own nuclear weapons program. Subsequently, Japan did not ratify the treaty until 1976. Additionally, this period saw the establishment

of civilian Japanese nuclear facilities. This is significant because the Japanese civilian plants validated the claims that state Japan could easily translate its civilian technologies into a viable nuclear weapons program.

Chapter IV analyzes the period from 1993-2007. Again, this period has presented two instances where Japan has considered developing nuclear weapons. The first instance was when Japan was asked to agree to the indefinite extension of the NPT. Japan was hesitant to support the extension because it would lock them into an agreement that would restrict their ability to fully address the increasing instability stemming from North Korea. The second instance is the current debate once again centers on instability from North Korea since 1998, but also the increasing political, economic, and military presence of China in the region.

Chapter V is the conclusion, where this thesis will discuss trends based on the incentives and disincentives from each case study that prevented Japan from developing nuclear weapons in the past. These trends will then be applied to the future debates and be used to construct possible policy options to aid U.S. policy makers. This thesis will accomplish this through use of primary and secondary sources. Primary sources will consist of an interview with the former Director of the Japan Desk and translated press releases. The press releases and commentary come from past and current politicians, regional experts, and scholars. The secondary sources will consist of books, journals, and articles.

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II. CASE STUDY I: POLITICS, ECONOMICS, AND SOCIETY OF 1960 TO 1965

A. INTRODUCTION

At the onset of World War II, the Japanese Army and Navy had initiated separate investigations to determine whether or not Japan possessed the capability to develop its own nuclear weapons program. The two services employed the services of Japanese scientists from Tokyo, Kure, and Osaka universities.²⁴ The knowledge gained from the Japanese scientists was invaluable as they had either studied nuclear technology in the United States or Europe prior to World War II. This was significant because their knowledge of nuclear power convinced Japan's leaders to continue with the plan to develop their own nuclear weapons program.²⁵

The first time Japan assessed its nuclear weapons capabilities was in 1943. Japan's nuclear weapons development plan was divided into four groups: A, B, C, and D. Group A investigated particle accelerators and the effect of high velocity particles on nuclei. Group B studied cosmic rays because existing knowledge held that it was possible to detonate uranium-235 or plutonium-239 with cosmic rays. Group C focused on the theoretical studies and Group D focused on medical concerns.²⁶ During the next two years, Japan was able to construct a cyclotron, the biggest outside of the United States, and a thermal diffusion plant. This was significant because the construction of a thermal diffusion plant gave Japan the ability to separate uranium-235 from uranium-238.²⁷

²⁴ Philip Henshall, *The Nuclear Axis: Germany, Japan and the Atom Bomb Race, 1939-1945*, (Gloucestershire, United Kingdom: Sutton Publishing Limited, 2000), 141.

²⁵ Ibid. Both the Army and Navy initiated separate investigations to determine whether or not Japan possessed the capability to develop its own nuclear program. The Navy had done so with the intentions of using it for the propulsion of its vessels. The Army, on the other hand, had intended to use nuclear power to develop offensive weapons.

²⁶ Ibid. Japan's groups were similar in structure to Germany's nuclear weapons development plan.

²⁷ Ibid.

Despite the transfer of nuclear technologies, material, and equipment from Germany, Japan was unable to produce an atomic bomb during World War II.²⁸ Although Japan was able to construct vital pieces of equipment necessary to develop nuclear weapons, the constant fire bombings that occurred during 1945 destroyed nearly all of its nuclear facilities.²⁹ The facilities, equipment, or materials that were not destroyed by the fire bombings were taken over by the Soviet Union. Coincidentally, the facilities the Soviets had captured proved very valuable as they used the stockpiled fuel for their own purposes.³⁰

During the period of 1945-1965, the international community witnessed the restructuring and evolution of the Northeast Asian region. Japan rebuilt its social, political, and economic structures to emerge as an economic superpower; war on the Korean Peninsula pushed the limits of the Cold War stalemate; and China became a nuclear weapons state. Because of these issues, Japanese politicians were forced to reconsider developing nuclear weapons. The question this chapter will assess is what were the factors that motivated Japan not to develop a nuclear weapons program?

In order to answer the question, one must understand the factors that fueled the debates. Those who were against the remilitarization of Japan argued that it should not develop a nuclear weapons program because of newly created policies/principles that promoted the goals of rapid industrialization. Conversely, the side that argued for the development of nuclear weapons did so out of fear that the rising Chinese power would take over the region.³¹

The central argument of this chapter is that the incentives to remain a non-nuclear power outweighed the incentives to develop a nuclear weapons program during this time. This decision was based on a series of political, social, and economic issues that influenced Japanese policy makers for decades to come, including the facts that: (1) the

²⁸ Henshall, *The Nuclear Axis: Germany, Japan and the Atom Bomb Race 1939-1945*, 183.

²⁹ Sarah J. Diehl and James Clay Moltz, *Nuclear Weapons and Nonproliferation* (Santa Barbara, CA: ABC-Clio, Inc., 2008), 61.

³⁰ "Nuclear Weapons Program: Japan," *Federation of American Scientists*, 16 April 2000 <http://www.fas.org/nuke/guide/japan/nuke/> (accessed 12 March 2007). The Russians had captured Japanese mining facilities that were maintained in Northern Korea.

³¹ Sadako Ogata, "Japanese Attitude toward China," *Asian Survey* 5, no. 8 (August 1965): 389.

physical and psychological effects of 1945 bombs were still fresh in the Japanese psyche; (2) the constitution and other treaties/principles were focused on economic development; (3) Japan's security responsibilities rested on the United States; and (4) Japan's economy could not support the development of nuclear weapons. The main point of this chapter draws out the specific social, political, and economic factors that dissuaded Japan from developing nuclear weapons.

B. POLITICAL FACTORS

Post-World War II, Japan's political structure was developed by external actors, specifically the United States, which emphasized the transformation of pre-war Japanese social, economic, and military structures. This was done through a series of treaties, policy directives, and economic reforms that ensured Japan would not re-militarize socially, much less develop a nuclear weapons program. As the period evolved so too did Japan's apparent need to re-arm. However, the perceived need to re-arm was not evenly distributed through the Japanese political and public spheres and a series of debates ensued. The catalysts for the debates stemmed from a shuffle in the East Asian regional context as a communist government emerged to lead China in 1949 and allied forces used Japanese soil to support the Korean War in the early 1950's. However, the debates reached a peak in 1964 when the Chinese tested its first nuclear bomb. This section will look at how specific treaties and post-war policies ensured that Japanese politicians would create and support future policies that guaranteed a continued non-militarized Japan.

1. New Constitution

When the Japanese surrendered on the deck of the *U.S.S. Missouri* on September 2, 1945, they gave up their status as a military power and ended the reign of its totalitarian government.³² In its place, the Supreme Commander of Allied Powers (SCAP) created the foundations for a revived democratic government by drafting a new

³² "Surrender of Japan, 02 September 1945 – Selected and Miscellaneous Views," *Naval Historical Center*, 07 March 1999, <http://www.history.navy.mil/photos/events/wwii-pac/japansur/js-8.htm> (accessed 2 June 2007).

Japanese constitution. To accomplish this, SCAP's draft constitution restructured the Japanese Diet so that complete governing control was placed within one entity. This was an improvement over previous systems where power was divided between the Diet, the cabinet, and the legislature. This division of power had allowed previous Japanese leaders to subvert established checks and balances; therefore, rendering them useless. After several provisions, Japan's Diet ratified the constitution and accepted the new government.

Another provision to the new constitution was Article 9. It stated that the "Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as a means of settling international disputes." Furthermore, it stated that "land, sea, and air forces, as well as other war potential, will never be maintained."³³ Article 9 was significant because it was created by external actors—specifically SCAP. General Douglas MacArthur, the leader of SCAP, and his staff created a constitution that removed the right for Japan to defend itself through re-armament or war. However, similar to how Japan was the first country to experience the atomic bomb, Japan was also the first country to renounce its warfare rights as a sovereign state. The Matsumoto committee was concerned about the implications of Article 9, but its post-war position, coupled with the Allied occupation and leadership control lying with SCAP, left Japan with no leverage to negotiate a more favorable deal.

2. San Francisco Peace Treaty and the U.S.-Japan Security Treaty of 1951

The SCAP organization was removed when the San Francisco Peace Treaty was signed in September 8, 1951. Subsequently, the U.S.-Japan Security Treaty was signed shortly thereafter. The security treaty provided the following provisions: (1) termination to the still-existent state of war; (2) withdrawal of occupational troops within ninety days; (3) restoration of Japan's sovereignty; (4) a right to self defense; and (5) access to international markets.³⁴

³³ James L. McLain, *Japan: A Modern History*, (New York: W.W. Norton & Company, Inc., 2002), 540.

³⁴ *Ibid.*, 558.

The first implication was that Japan was no longer an occupied state directly under the supervision and control of the United States—because of the security treaty; the two countries were now allies. The Korean War was occurring at the same time the peace treaty was signed and now that Japan was a sovereign state it was expected to participate in international affairs. However, Japan did not possess a military and therefore it could only provide support to nations actively fighting in the war through use of its position in the region. Japan’s proximity to the Korean Peninsula, and to the Soviet Union and China, proved an invaluable staging point for U.N. and U.S. military projection of power.³⁵

The second implication was that the security of Japan now rested with the United States. Since Japan had already approved the construction of bases and use of port facilities by the United States, the transition of stationing troops was simplified. Although the primary purpose of maintaining U.S. forces on the islands was to preserve regional stability and contain the spread of communism, there also existed a secondary reason. The additional tasking of the U.S. forces was to serve under the direction of the government and act as local police force responsible for suppressing riots and disturbances.³⁶ Finally, the security treaty also stated that Japan was not permitted to extend the same basing rights to third party countries without the consent of the United States. It was for these reasons that Japanese Prime Minister Yoshida Shigeru was able to concentrate on the development of the country’s social, political, and economic systems while effectively staying out of the war occurring on the Korean Peninsula.

However, the peace and security treaties also served as the catalysts for the initial debates concerning the defense of Japan. The specific debates concerned whether or not Japan had really regained its sovereignty when it was now so reliant on the United States. Prime Minister Yoshida argued that the key for Japan to once again become a powerful country was not through the buildup of military forces but through rapid economic

³⁵ James L. McLain, *Japan: A Modern History*, (New York: W.W. Norton & Company, Inc., 2002), 558. The security partnership between the United States and Japan meant that the United States could construct bases and facilities to maintain a viable presence in the region to support the containment strategy aimed at the Soviet Union and communist China.

³⁶ *Ibid.*, 557.

industrialization. To support his argument, he claimed that the alliance between the United States and Japan not only meant security guarantees, but also provided technological transfers, economic assistance, and access to the international markets. Furthermore, he argued that the alliance did not suppress Japan's sovereignty, but provided mechanisms that ensured a source of military technology, defense assistance, and external political support for some level of rearmament.³⁷

Unfortunately, Prime Minister Yoshida's arguments had done little to quell opposing groups that claimed the security and peace treaties did little to restore Japan's sovereignty. Although the Japanese supported the ideals of a peace and security treaty, they were concerned that Prime Minister Yoshida conceded too much to get them. In an effort to rally support, opposing groups often referred to Japan's new sovereign status as one of "Subordinate Independence." In 1952, the *Asahi Shimbun* newspaper conducted a poll that stated only 18% of society believe Japan was truly independent.³⁸

The opposing groups were concerned because the United States could operate without regard to Japanese interests. For example, if the United States were to attack a country from Japanese soil, the logical retaliatory tactic would be to directly attack Japan. Therefore, a partnership with the United States could inevitably drag Japan into war that was not based on Japanese interests, but American foreign policy. This fear was validated as polls reflected a decline in Japanese confidence in Prime Minister Yoshida's ability to lead the country. After a series of public outbursts directed towards the opposing group's claims and accusations, he resigned from office in 1954.

3. The 1960 Treaty of Mutual Cooperation and Security

Although Prime Minister Yoshida stepped down from office in 1954, he ensured his vision of creating a state that would economically and technologically transform how the current superpowers, the United States and the Soviet Union, influenced future Japanese leaders. This idea was formalized in what was known as the Yoshida doctrine

³⁷ Michael J. Green, *Japan's Reluctant Realism*, (New York: Palgrave, 2003), 12.

³⁸ McLain, *Japan: A Modern History*, 559.

and the basic premise called for a strong and unified alliance with the United States. The part of the revision that concerned the extension of security matters stated the following:

Each party recognizes that an armed attack against either Party in the territories under the administration of Japan would be dangerous to its own peace and safety and declares that it would act to meet the common danger in accordance with its constitutional provisions and processes.³⁹

A strong alliance with the United States proved to be a key factor to Japan's economic success. In an effort to take advantage of this fact, Prime Minister Kishi Nobusuke presented a revision to the U.S.-Japan Security Treaty in 1960. The purpose was to ensure that Japan would continue to economically industrialize by further solidifying its alliance with the United States.

The U.S.-Japan Security Treaty, also known as the Treaty of Mutual Cooperation and Security, drew the two countries closer together by removing the clauses giving the U.S. military a role in Japanese internal security and replaced them with mutual obligations.⁴⁰ This meant that the U. S. forces were only responsible for protecting Japanese interests from external forces. This was accomplished by Japan agreeing to the construction of more bases and allowing more troops on the island.

Naturally, the thought of a treaty that would strengthen ties with the United States, as opposed to creating a treaty that would move Japan towards a state of true sovereignty, created a heated debate between Japanese politicians and the Japanese public. However, the difference between the two debates, over the 1951 peace treaty and the revision of the treaty in 1960, was the magnitude of dissent that came from the opposing groups. The violent protests that stemmed from the Japanese public influenced the Japanese Diet, as opposing groups within the political system staged similar protests. The leftist Japanese Socialist Party (JSP) went as far as trying to physically prevent the

³⁹ Kurt M. Campbell, Robert J. Einhorn, and Mitchell B. Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, (Washington, D.C.: The Brookings Institute, 2004), 221.

⁴⁰ Green, *Japan's Reluctant Realism*, 14.

members of the Liberal Democratic Party (LDP) from entering the chamber to vote on the treaty. The 1960 revision eventually passed through the Diet without the consent of the JSP.⁴¹

The significance of the debates that occurred as a result of the U.S.-Japan Security revision of 1960 was that subsequent prime ministers' rhetoric centered on the continued economic development of Japan. For example, Japanese politicians understood that continued economic success would result only from a strong U.S.-Japan alliance. However, Prime Minister Kishi's effort to get the 1960 revision through the Diet cost him his position because the Japanese public had seen the strengthening of ties with the United States as counter productive in its quest of normalization. Despite the strong opposition, Prime Minister Kishi continued to stress the importance of strengthening alliances with the United States and since the LDP, his party, dominated the House of Representatives, the 1960 revision passed through the Diet. His successor, Ikeda Hayato assumed control of the party in 1960 and his platform concentrated solely on furthering economic development. He went as far as promising the Japanese public that his policies would double Japan's national income by the end of the next decade. His policies were able to accomplish this task in half the time.⁴²

The 1960 security treaty originated at a time when Japan's economy was beginning its climb toward becoming the second largest economy in the world.⁴³ As long as the Japanese leadership did not stray from ensuring this would occur, the Japanese public would continue to support them. This was evident as the LDP firmly controlled the Diet for the next four decades because of their concentrated efforts on economic industrialization. Even though the 1960 security revision focused on strengthening alliances with the United States, it implied that Japan could solely focus on economic development, thus keeping the Japanese public happy.

⁴¹ Green, *Japan's Reluctant Realism*, 14. According to Japanese law, if the Upper House of the Diet fails to vote on a specific issue within 30 days and the House of Representatives maintains a 2/3 majority vote, it will pass by default.

⁴² *Ibid.*, 15.

⁴³ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 220.

4. Political Implications of the Chinese Atomic Bomb Test

China's 1964 atomic bomb test and its implications for the international community were best summarized by a Slovak Communist Party statement, "The first experimental atomic bomb has been exploded in the Chinese desert, and above it, a cloud of problems opened in its wings."⁴⁴ The significance of the test, as it pertained to Japan, was that it prompted the Japanese leadership to openly discuss the need for the development of its own nuclear weapons program. This was the first time in the post-war period that these discussions occurred and this time serious consideration was made about the feasibility of its implementation. Despite interpretations that stated Japan was legally permitted to develop its own nuclear weapons program, it continued to abstain.⁴⁵ This section will discuss the political reactions to the Chinese atomic bomb test and why the political system decided to abstain from developing nuclear weapons.

Japan's political decision not to develop a nuclear weapons program was based on two reasons. The first reason was due to the series of treaties that ensured Japan's security through its alliance with the United States. Just a short time before the test, Japan resigned the 1951 Security Treaty to ensure the United States would continue to protect Japan against external aggressors by assuming responsibility for its security. This enabled Japan to assure the domestic population and the international community that it did not need to pursue actions independent of the United States' policies.

Additionally, the United States was adamant about Japan maintaining its non-nuclear status because the China nuclear test had created a new series of problems that affected the international community. These problems included: (1) how Beijing was going to exploit its new weapon; (2) the Soviet Union's response to the atomic test; and (3) if the United States was going to address the issue unilaterally or multilaterally with

⁴⁴ Clemens Jr., "Chinese Nuclear Tests: Trends and Portents," 111.

⁴⁵ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 221. Japanese elites supported Prime Minister Sato's intentions to develop a nuclear weapons program by finding "loopholes" in its Constitution and peace and security treaties. For example, advocates stated that the use of tactical weapons, as opposed to strategic weapons, could be defined as defensive nuclear weapons. This was due to the small yield of tactical weapons and as long as they were used for *defensive* purposes, they were legally permitted.

the Soviet Union.⁴⁶ Therefore, the United States did not want to contend with Japan attempting to create its own nuclear weapons program.

Fortunately, the Chinese government issued a series of statements that eased the international community's concerns about its intentions to use nuclear weapons for defensive purposes only. This was accomplished by reiterating its support for a comprehensive nuclear test ban treaty and stating "that China will never, at any time, under any circumstances, be the first to use nuclear weapons."⁴⁷ Additionally, the United States and the Soviet Union were convinced that China's incipient nuclear program did not pose a threat to stability within the region. Therefore, it was by association that Japan was not to be concerned with China's new nuclear weapons capabilities.

The second reason Japan decided not to develop its own nuclear weapons program was its focus on economic development. At the time of the test, Japan had positioned itself toward becoming an essential player within the international economic markets and public sentiment ensured Japanese politicians would continue this trend. This fact was enforced when Prime Minister Sato stated, "Japanese public opinion will not permit this at present."⁴⁸ Although Prime Minister Sato continued to say that he believed the public could be educated to understand the need for nuclear weapons, the overwhelming public opinion that favored economic progress over a major military buildup kept these statements from going public.

C. ECONOMIC/TECHNOLOGICAL FACTORS

1. Economic Factors

The social and political factors discussed earlier in this chapter created mechanisms that focused on the rapid industrialization of Japan's economy, and show how the effectiveness of these mechanisms convinced Japanese political leaders that the benefits of concentrating on its economy outweighed the benefits of developing a nuclear

⁴⁶ Clemens Jr., "Chinese Nuclear Tests: Trends and Portents," 112.

⁴⁷ Ibid., 220.

⁴⁸ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 222.

weapons program. The major economic reasons for Japan's defeat during World War II are summarized as follows: (1) effective enemy submarine attacks against Japan's commercial shipping and port facilities; (2) the weak resource position of Japan proper; (3) air attacks on reconstruction efforts during the war; and (4) weak administration and planning.⁴⁹ These reasons were significant because they amplified the issues that Japanese political leaders needed to address as they attempted to rebuild a once strong economy. Additionally, Japan's political leaders had to contend with its rural areas having to absorb the surplus of industrial workers whose jobs were lost after the war.⁵⁰

Fortunately, the war had not affected the Japanese work ethic that before the war had created a Japanese economy that ranked among the world's elite. Therefore, when occupational forces constructed an initial post-war infrastructure that let Japanese leaders focus on economic industrialization, the war torn country was rapidly transformed into an economic and technological leader. To accomplish this, Japan applied a pre-existing work ethic to evolving political, social, and economic structures. Japan focused on the establishment of a banking system that was used to channel resources towards industry that could quickly rebuild the country.⁵¹ It then carried out land reform targeting medium and big land ownership and encouraged labor movements that served to increase the labor's share in the distribution of income. Finally, political leaders complemented Japan's ability to sustain high savings rates and accumulate large amounts of capital by creating a progressive income tax schedule and social security program.⁵²

⁴⁹ Alfred D. Morgan, "The Japanese War Economy: A Review," *The Far Eastern Quarterly* 8, no. 1 (November 1948): 65.

⁵⁰ Jesse F. Steiner, "Japan's Post-War Population Problems," *Social Forces* 31, no. 3 (March 1953): 248. These workers included many hundreds of thousands of civilian repatriates, returned soldiers, and unemployed urban workers.

⁵¹ "Assertiveness Training: Hardball for a Change," *The Economist* (22 July 2006): 42.

⁵² Saburo Okita, "Savings and Economic Growth in Japan," *Economic Development and Cultural Change* 6, no. 1 (October 1957): 38.

These changes led to a national income increase of 11% from 1955 to 1956. During the same time period, the ratio of gross capital formation to gross national product was 30%.⁵³ Japan was able to accomplish and sustain these growth rates for two reasons. The first reason was due to its relationship with the United States. Economically, the relationship gave Japan preferential access to the U.S. market and financial exchange through trade—it was no coincidence the United States was Japan’s biggest trade partner.⁵⁴

Japan continued to experience rising economic growth rates throughout the stated period. Although one can partly attribute the rapid economic gains to changes in the political mindset, it must be noted that the changes were prompted by the Japanese public. Japan’s social structure willingly accepted the shift from its military posture and eagerly directed its efforts towards the country’s new goals that concentrated on industry and technological development. Japan supported the increasing workforce demand by reallocating the population that originally migrated to the rural areas after the war back to the industrial centers of Japan. More importantly, Japan continued to support both the agricultural sector and the reforming industrial sectors.

The successful results of Japan’s economic industrialization required a dedicated effort from both the political and social sectors. Japanese leaders knew the key to ensuring Japan’s continued upward economic trend required strengthening the existing alliance with the United States and maintaining a positive public psyche. Unfortunately, as the period evolved, it became nearly impossible to achieve a harmonious balance between the two. Despite that fact, Japanese leaders knew the alliance with the United States would provide security from external aggressors. This, in turn, enabled Japan to concentrate on its economic goals, preventing the Japanese public from pushing for a nuclear capability after China tested its atomic bomb in 1964.

⁵³ Saburo Okita, “Savings and Economic Growth in Japan,” *Economic Development and Cultural Change* 6, no. 1 (October 1957): 39.

⁵⁴ Morgan, “The Japanese War Economy: A Review,” 70.

2. Technological Factors

Japan's scarce resources and increasing industrial and economic power prompted the Japanese government to pursue alternative energy means. The leading candidate to meet these needs was nuclear power. However, the negative Japanese perception concerning the use of nuclear power, even for civilian purposes, caused a great deal of concern not only domestically, but also throughout the international community. This was because the nuclearization of Japan, even for civilian purposes, would provide it with fundamental building blocks to possibly develop a nuclear weapons program in the future. This section will look at the mechanisms put in place to ease public and international concerns relating to the civilian nuclearization of Japan.

In December 1955, the Japanese government created the Atomic Energy Basic Law that stated "The research, development, and utilization of atomic energy shall be limited to peaceful purposes."⁵⁵ The objective of the law was to provide Japan with secure energy sources for the present and future. In order to gain international support for the use of nuclear power, Japan created numerous organizations that would fully cooperate with established international nuclear agencies. Two organizations in particular, the Atomic Energy Commission and the Nuclear Safety Commission, were directly under the control of the Prime Minister's office. Therefore, the International Atomic Energy Agency (IAEA) was assured that it would have no problems ensuring that Japan's intentions to possess nuclear power were indeed for civilian purposes.⁵⁶ Surprisingly, domestic concerns about nuclear power were not that difficult to overcome. Most of the opposition emanated from the people that resided near the proposed construction sites.⁵⁷ Aside from that, the Japanese public was not adverse to the use of nuclear power as long as it was for civilian purposes.

⁵⁵ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 221.

⁵⁶ "Non-Proliferation Policies in Japan: The Atomic Energy Basic Law," *Japan Nuclear Cycle Development Institute* <http://www.jaea.go.jp/jnc/kaihatu/hukaku/english/atomiclaw.htm> (accessed 14 June 2007).

⁵⁷ Peter Dauvergne, "Nuclear Power Development in Japan: "Outside Forces: and the Politics of Reciprocal Consent," *Asian Survey* 33, no. 6 (June 1993): 578.

The significance of Japan's acceptance of nuclear power for civilian purposes was not fully realized until recently. But for the purposes of the stated period, 1960-1965, the simple fact that Japan so eagerly turned to nuclear power as a primary source of energy proved that Japan's negative perception towards nuclear power was not so firmly established. However, the peace and security treaties that were signed during the period, and the subsequent signing of a treaty that reaffirmed them during the later parts of the period, showed that the Japanese were still very much against the state re-militarizing or utilizing nuclear power for the development of weapons.

D. SOCIAL FACTORS

At the beginning of this period, the Japanese people gained the distinction of being the only country to experience a nuclear attack. In September 1953, Hugh M. Gloster was one of the first Americans tasked with analyzing Japan after the war. He was a Fulbright professor assigned to Hiroshima University post-detonation and his assignment was to analyze the physical and psychological effects of the bombs on Japanese society. His findings, coupled with a series of polls, proved that the physical and psychological effects of the bombs dropped on Hiroshima and Nagasaki continued long after August 9, 1945. These effects formed perceptions that were very influential as Japan forced its first decision on whether or not to develop its own nuclear weapons program.

1. Physical Destruction

On his city tour, Gloster's attention was first drawn to a "skeleton of a shattered steel and concrete structure" that was once Hiroshima's proud Industrial Exhibition Hall.⁵⁸ This building, as noted by the survivors he interviewed, was somehow spared from the devastation and remains today as a reminder of the destruction of the bomb. The survivors also recounted how the falling buildings, flying objects, and blast pressure killed thousands of people. They recounted walking through the town and seeing the faces of the dead bodies. The dead bodies were the lucky ones because the survivors now

⁵⁸ Hugh M. Gloster, "Hiroshima in Retrospect," *Phylon* 17, no. 3 (3rd Qtr., 1956): 272.

had to figure out a way to rise out of the dust and rubble that once represented their highly industrialized city and infrastructure. Additionally, they had to deal with the long-term physical effects of the radiation, something that no society knew how to deal with.

2. Psychological Destruction

The Japanese were able to quickly rebuild Hiroshima and Nagasaki and their respective infrastructures. However, the survivors noted that the blasts destroyed not only the buildings and infrastructure, but also the psyche of thousands of men, women, and children. The best example Gloster encountered came thanks to the insights of his mentor, Watanabe Kanae. Watanabe described how many of the Westerners perceived the “Japanese faces as Oriental masks which conceal all emotion.”⁵⁹ But, as Watanabe also noted, “concealing these emotions was something the Japanese were good at.”⁶⁰ However, Gloster was still able to detect the presence of pain and regret as he read a sign that was posted at one of the many memorial parks. It read:

All earthly things are transient and of the thousands of buildings that met the same fate, this alone is now preserved to symbolize our wish that there may be No More Hiroshimas.⁶¹

3. Public Perception

To demonstrate how the physical and psychological effects of the bombs influenced Japan’s decisions seven years later, public opinion polls were conducted by the major newspapers. The polls showed how the Japanese public linked current offensive talk of war with the atrocities of what happened a decade earlier. Prompted by the Korean War, the *Asahi Shimbun* newspaper conducted a poll in 1952. It stated that only 38% of society favored the creation of a Self-Defense Force as a means to protect itself in the event the Korean War would expand to its shores. Of that 38%, 60%

⁵⁹ Hugh M. Gloster, “Hiroshima in Retrospect,” *Phylon* 17, no. 3 (3rd Qtr., 1956): 272.

⁶⁰ *Ibid.*

⁶¹ *Ibid.*

consisted of post-war youth.⁶² The second question asked by the *Asahi Shimbun* specifically targeted the post-war youth. It asked what they would do if Japan was directly attacked, 41% of the Japanese youth said they would fight back, 11% said they would not fight, and 5% said they would flee.⁶³

Also during the Korean War, another series of polls were conducted asking if nuclear weapons should be used. Although 85% of Japanese wanted to end the war early, 73% of them were opposed to the use of nuclear weapons. Furthermore, the 73% broke down as follows: 55% considered nuclear weapons to be inhuman; 12% did not want to repeat Hiroshima/Nagasaki; 9% wanted to avoid human extermination; 5% feared nuclear weapons would result in World War III; and 3% objected to becoming the victim of a retaliatory attack.⁶⁴

These numbers should have been sufficient indicators of public perception as Japanese leaders attempted to make policy changes. Because of the physical destruction and psychological damage that occurred because of the bombs, it was no surprise that society was quick to remove political representatives that wanted to revise treaties or policies that were created to prevent a future Hiroshima or Nagasaki. In 1957, Prime Minister Kishi Nobusuke consolidated all liberal factions and created the Liberal Democratic Party (LDP), at which point he became party president and Prime Minister. His primary focus as Prime Minister was to reinforce the security guarantees provided by the United States by presenting a revised treaty to the Japanese legislation. The revised treaty was prompted by the results of the Korean War, as Japan saw its responsibilities in the region change. Prime Minister Kishi felt these facts, coupled with firm control of the

⁶² Yasumasa Tanaka, "Japanese Attitudes Toward Nuclear Arms," *The Public Opinion Quarterly* 34, no. 1 (Spring, 1970): 29. Post-war youth were the members of Japanese society that were born during or after World War II. They were specifically targeted by Prime Minister Nobusuke Kishi because they were too young to understand the atrocities of war and were educated in the post-war period. He felt that if Japan were to change its non-military posture, the support of post-war youth was essential.

⁶³ *Ibid.*, 31.

⁶⁴ Tanaka, "Japanese Attitudes Toward Nuclear Arms," 29.

Japanese Diet, would have been sufficient to change public perception. However, this proved to be a lethal move, as Prime Minister Kishi and his cabinet were quickly removed from office.⁶⁵

Prime Minister Kishi thought the memories of the bombs dropped on Hiroshima and Nagasaki no longer resided in the minds of Japanese. Additionally, he thought the Japanese that had direct experience with the war were gradually being replaced with the new post-war youth.⁶⁶ However, the polls taken during the stated period showed that regardless of the age group that was emerging in Japanese society, the physical and psychological scars from World War II still influenced Japanese decisions.

4. Public Perception of China's Atomic Bomb Test

The period from 1960-1965 began with a society that was faced with having to recover from the destruction caused by nuclear weapons. Because Japan was the only country that lived through the physical and psychological destruction of nuclear weapons, the population wanted to ensure the country would not have to go through such an ordeal again. This was evident when leading Japanese officials were quickly replaced by those that would attempt to modify the policies and treaties established to prevent Japan from re-militarizing—this also included the development of nuclear weapons.⁶⁷

Although it was nearly twenty years after Hiroshima and Nagasaki when China tested its first atomic bomb, the memories from August 1945 were still prevalent in the minds of the Japanese. Despite the obvious lack of public support for Japan to adopt any sort of offensive capabilities, China's atomic bomb test forced Japanese officials to consider the need for their own nuclear weapons program. Because this was the first time during the post-war period that these discussions had taken place, high-ranking Japanese officials were careful about not making the public aware of their possible intentions. Their concerns were based on two factors.

⁶⁵ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 221.

⁶⁶ Tanaka, "Japanese Attitudes Toward Nuclear Arms," 26.

⁶⁷ *Ibid.*, 26.

The first factor was based on keeping Japan focused on improving the economy. At the time of the nuclear test, Japan had integrated itself as a vital participant within the international market economy. The Japanese public was not only proud of this accomplishment, but demanded their political leaders continue to direct Japan down this same path. This was evident when Japanese political leaders were quickly removed from office if their policies did not support the goal of continued economic industrialization.

The second factor was based on Japan's "nuclear allergy."⁶⁸ The genesis of this term was based on the physical and psychological effects of the bombs dropped on Hiroshima and Nagasaki and how they created an aversion towards the re-militarization of Japan. Naturally, this opinion opposed Japanese political leaders considering the development of a nuclear weapons program. The belief was that if Japan possessed nuclear weapons and if it were involved in another war, nuclear weapons would undoubtedly again be used against Japan. Therefore, if Japan's political leaders possessed the means to carry out war, they would. This belief was framed by James Fallows:

Japan seems unanimously and permanently convinced that the war led to catastrophe for the country. Moreover, the prevalent view in Japan is that the war was caused by a clique of semi-crazed militarists, who seized control of the country and forced everyone else into what was clearly a suicidal undertaking.⁶⁹

Based on the Japanese public's concerted efforts towards the economic industrialization of its country, China's atomic bomb test had succeeded in only causing debates amongst the Japanese politicians. The bomb had little to no effect on the Japanese public itself. Because the Japanese elite were aware of the public reaction that would result from developing a nuclear weapons program, they decided not to pursue the idea during this period.

⁶⁸ Jocelyn Ford, "Japan / Nuclear: Background Report," *Federation of American Scientists*, 08 October 1999, <http://www.fas.org/news/japan/991008-japan20.htm> (accessed 02 June 2007).

⁶⁹ Interview with Lieutenant Colonel David Hunter-Chester, U.S. Army, assistant director, plans and policy, headquarters, J5, U.S. Forces Japan, Yokota AFB, Japan, 20 January 2000 as cited in David C. Rasmussen, "Credible Nuclear Deterrence For Japan," M.A. thesis, Naval Postgraduate School, (Spring 2000), 17.

E. CONCLUSION

The Chinese atomic bomb test in 1964 was the culminating factor that fueled debates as to whether or not Japan should develop a nuclear weapons program during the period from 1960-1965. These debates represented the first time since the end of World War II that Japan considered such an action. Despite Japan's vital integration within the international economic markets, it was not yet prepared to assume the additional responsibilities of a state that possessed nuclear weapons. The purpose of this chapter was to determine why Japan decided not to develop a nuclear weapons program at the time. To answer that question, this chapter analyzed the period from 1960-1965 and determined that Japan's social and political systems were structured to focus solely on the economic industrialization of the state. Japan was able to do this because of the U.S.-Japan security alliance.

To support this conclusion, this chapter showed that the end of World War II created a Japanese state that was physically and psychologically destroyed from both: (1) the firebombing campaigns against industrial nodes; and (2) the atomic bombs dropped on Hiroshima and Nagasaki. This created an aversion to war within the psyche of the Japanese social system. The evidence of the pacifist anti-war sentiment was seen through the use of polls administered by major newspapers and the removal of political officials that strayed from the country's targeted goals of economic industrialization.

Politically, Japan created a structure that resurrected the once highly developed state. However, it was not without the assistance and eventual alliance with the United States. The assistance came in the form of financial aid, foreign investment, and advisory groups. The most significant group, SCAP, "assisted" Japan in the development of a new constitution that prevented the remilitarization of Japan. The allied occupation further assisted Japan in creating social, political, and economic structures that could take advantage of U.S. aid.

The allied occupation evolved into an alliance between the United States and Japan in 1951, when the first of a series of treaties were signed. The San Francisco Peace Treaty and the U.S.-Japan Security Treaty ended the allied occupation and restored Japan's rights as a sovereign state. Additionally, the peace and security treaties made the

security of Japan the responsibility of the United States. This was significant for two reasons. The first was economic based, as Japan was able to fully concentrate on continued economic industrialization and fully integrate itself within the economic international markets. The second reason ensured that Japan was protected from external aggressors. Therefore, it did not have to risk domestic upheaval attempting to create a separate military to address possible external aggressors. Additionally, when the Chinese tested their atomic bomb in 1964, Japan was confident in the United States' ability to deter any Chinese attack.

Although the revision to the security treaty in 1960 caused the most contested and violent debates amongst the Japanese public and political leaders, the ratification of the Mutual Treaty for Security and Cooperation strengthened the alliance between the United States and Japan. It was through the strength of the alliance, during the period from 1949-1964, that Japan was able to minimize its involvement in regional affairs and concentrate on evolving into the world's second largest economy. Because it wanted to maintain and improve on its status, Japan decided not to develop a nuclear weapons program.

III. CASE STUDY II: POLITICS, ECONOMICS, AND SOCIETY OF 1970 TO 1976

A. INTRODUCTION

During the period of 1970-1976, Japan was once again faced with the decision to develop nuclear weapons. In 1970, Japan signed the Non-Proliferation Treaty (NPT); however, it was not until 1976 that Japan ratified the document. This chapter will answer why the debate over signing the NPT caused Japan to once again consider developing nuclear weapons. Specifically, what were the political, economic, and social factors that fueled the debates and why did Japan eventually decide not to develop a nuclear weapons program during this period?

In order to answer these questions, one must understand what fueled the debates that surrounded the NPT issue. Those who argued that Japan should ratify the NPT and therefore forego the development of nuclear weapons had done so for multiple reasons. First, a non-nuclear Japan ensured stability in the Far East region by not presenting itself as a threat to a nuclear People's Republic of China (PRC).⁷⁰ Second, the United States and Japan reaffirmed their alliance, and subsequent U.S. security responsibilities, by extending the 1960 Treaty for Mutual Cooperation and Security in 1970. Third, the Guam—or Nixon—Doctrine of 1969 compelled by U.S. engagement in Vietnam, also shaped security thinking in Japan. The Nixon Doctrine afforded U.S. assurances to allies in the region against nuclear threats; however, it asked allies to do more to provide for their own defense in conventional capabilities.⁷¹ It formed the nuclear umbrella of deterrence for Japan, without the need for Japan itself to possess nuclear weapons—although this was a main point of discussion in the Japanese Defense White Paper of 1970. Fourth, in 1975 Japan became a member of the G-7, establishing its place among the world economic leaders.⁷² Having gained a prominent international position of

⁷⁰ Monte R. Bullard, "Japanese Attitudes Toward Nuclear Arms," *The Public Opinion Quarterly* 34, no. 1 (Spring, 1970): 848.

⁷¹ Robin Sakoda (Director of Japan Desk, DOD) interview with author via email 18 October 2007.

⁷² Rosser, Jr. and Rosser, *Comparative Economics in a Transforming World Economy*, 150.

equality sought since the Washington Naval Conference of 1922, the pursuit of nuclear weapons could jeopardize this status and Japan's image as a cooperative and peaceful nation. Finally, the fifth reason supporters for the ratification of the NPT argued that, aside from economic ventures, Japan should maximize a positive impression on the international community in the form of Comprehensive Security. This initiative was developed by Prime Minister Ohira and implemented under Prime Minister Suzuki in the late 70's and early 80's. The premise of this initiative was used to explain the importance of building international confidence in the areas of diplomacy, energy security, second order cybernetics, and greater transparency of financial markets.⁷³

Conversely, those against ratification of the NPT argued that it restricted Japan's ability to grow and evolve. Japan had developed into a political and economic world power. However, it was not considered a "superpower" because of its non-nuclear status.⁷⁴ If Japan signed the NPT, it would ensure itself a position within the international community that was not commensurate with its actual capabilities. Some Japanese questioned the credibility of the United States security guarantees and whether or not they would actually defend Japan in a nuclear conflict—or a conflict that might lead to the use of nuclear weapons. Some Japanese questioned the NPT's ability to reduce current nuclear stockpiles and prevent future nuclear-aspiring states from proliferating. Why should Japan sign a treaty that would prevent it from developing a means to defend itself if everyone else possessed nuclear weapons?

The focus of this chapter is that, despite the arguments against the ratification of the NPT, the incentives to remain a non-nuclear power and ratify the NPT outweighed the incentives to develop a nuclear weapons program. This decision was based on a series of political, social, and economic issues that influenced Japanese policy makers during this period. These factors were represented by Japan's "Four Nuclear Policies": (1) the peaceful promotion of nuclear energy; (2) the support for nuclear disarmament; (3) the belief in extended deterrence from the United States; and (4) the support for the Three Non-Nuclear Principles. This chapter will draw out the specific political, social, and

⁷³ Kurt W. Radtke and Raymond Feddema, eds., *Comprehensive Security in Asia: Views from Asia and the West on a Changing Security Environment* (Boston, MA: BRILL), 2.

⁷⁴ Monte R. Bullard, "Japanese Attitudes Toward Nuclear Arms," 847.

economic factors that formulated these policies, convinced Japan to ratify the NPT, and subsequently prevented Japan from developing nuclear weapons.

B. POLITICAL FACTORS

Not long after the 1964 China atomic bomb test, Japanese political leaders were once again compelled to reconsider their current and future stance on the development of a nuclear weapons program. In 1970, Japan reluctantly became a signatory member of the NPT, largely because of U.S. pressure. However, instead of quickly ratifying the document, Japanese political leaders commenced a series of debates that lasted six years. The eventual ratification of the NPT in 1976 was prompted by numerous policies, reports, documents, and treaties that solidified Japan's non-nuclear stance. This section will state the purpose of each policy, report, document, or treaty and how they persuaded Japan to abstain from developing nuclear weapons and ratify the NPT.

1. The Three Non-Nuclear Principles

The United States was concerned about the fact Japan had not signed the U. N. endorsed NPT in 1968 after its negotiation. The lack of immediate signature was because Prime Minister Sato was attempting to regain control of Okinawa. To do this, Prime Minister Sato eventually signed the NPT, but also concentrated on courting the Johnson administration by publicly supporting U.S. policies during Vietnam and allowing the access of U.S. aircraft carriers to Japanese ports.⁷⁵

Just as important, Prime Minister Sato had to overcome a Japanese public that did not want an island stockpiled with U.S. nuclear weapons. The United States kept the weapons cache in Okinawa in case they were needed against opposing regional powers, as in the case of China, or instability that might stem from such countries as Vietnam or North Korea.⁷⁶ To reassure the international and domestic community of its non-military intentions, Prime Minister Sato forwarded the Three Non-Nuclear Principles. It stated that Japan would not possess, manufacture, or permit nuclear weapons on Japanese

⁷⁵ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 221.

⁷⁶ *Ibid.*, 222.

land.⁷⁷ The Diet never placed them into law. However, this did not matter as the principles were widely accepted by Japan's society and created the foundation for future nuclear weapons policies.

2. 1968/1970 Internal Report

Prior to the NPT's negotiations, an advisory board had been formed by Prime Minister Sato in 1967 to conduct research on the costs and benefits of Japan's possible nuclearization. The board consisted of four non-governmental Japanese academics that specialized in either the nuclear or political science fields.⁷⁸ The government conducted the study to determine whether the incentives to remain non-nuclear would outweigh the incentives to develop nuclear weapons.

The main objectives were two-fold.⁷⁹ First, Japanese political leaders wanted a specific list of reasons as to why Japan should remain a non-nuclear state. This list could be used to dispel supporters who might argue that Japan should develop a nuclear weapons program. The second objective was meant to convince the international community that Japan did not possess the capabilities or the motivation to develop a nuclear weapons program.

The report was significant because it concluded that the benefits of developing a nuclear weapons program did not outweigh the benefits of remaining a non-nuclear state. It concluded that the technological, strategic, diplomatic, and political constraints were too great to overcome. Specifically, the report highlighted the following constraints: the limited nature of the Chinese nuclear threat, strategic problems associated with nuclearization, and diplomatic and political problems associated with nuclearization.⁸⁰

First, the Chinese nuclear weapons capabilities were considered a non-threat because it would exercise constraint in the face of the United States' extended deterrence

⁷⁷ Bullard, "Japanese Attitudes Toward Nuclear Arms," 850.

⁷⁸ Non-governmental academics were used because their product would be a more frank assessment of the costs and benefits of developing nuclear weapons. They were not constrained by the internal and external political red tape usually associated governmental structures.

⁷⁹ Yuri Kase, "The Costs and Benefits of Japan's Nuclearization: An Insight in the 1968/1970 Internal Report," *The Nonproliferation Review* 8, no. 2 (Summer, 2001): 56.

⁸⁰ *Ibid.*

capabilities. Second, the strategic problem associated with nuclearization was based on Japan's vulnerability to a nuclear attack. When the report was conducted, 50% of Japanese population and industry resided in only 20% of the country. Finally, the diplomatic and political problems centered on the isolation Japan would experience through U.S. abandonment. Specifically, an isolated Japan would not only suffer from the loss of security provided by the United States, but would also have to contend with a hostile Soviet Union and China. Based on these constraints, the report recommended that Japan maintain its security alliance with the United States.

3. Japan's Defense White Paper

The Japanese Defense White Paper of 1970 re-affirmed the Three Non-Nuclear Principles and it also stated that Japan should not become too dependent on foreign countries for its security and defense.⁸¹ Japan believed in the overall moral character and anti-war direction of the international community that had been established by the U.N. However, Japan was also convinced that the complexion of the international community was always changing and not necessarily for the better. Japan wanted to leave itself room for the possible future development of nuclear weapons. The White Paper presented the possibility that relations and alliances were not bullet-proof and could change for the worse.

The significance of the White Paper was that it addressed possible future threats that could arise if the current means for security should fail; therefore, it showed the importance of maintaining and strengthening the current alliance with the United States. This was evident by the renewal of the 1960 Security Treaty a few months later.

4. Indefinite Renewal of the Treaty of Mutual Cooperation and Security

The 1970 joint communiqué signed between the United States and Japan consisted of fifteen clauses, but the first three are of particular importance to promoting stability in the region and part of that was ensuring that Japan did not develop a nuclear weapons program. The first three clauses were: (1) both countries agreed to maintain the

⁸¹ Bullard, "Japanese Attitudes Toward Nuclear Arms," 850.

1960 Security Treaty in its current form; (2) the United States agreed to restore Japan's administrative rights over the Ryukyu Islands by 1972; and (3) the United States and Prime Minister Sato considered the security of South Korea very important to stability of the region.⁸²

This was significant because despite public protests against continuing the alliance with the United States, Japan realized it could not guarantee its own security and therefore depended on the U.S.-Japan security alliance. Additionally, a relationship with the United States also meant it would still have favorable access to the international market and continue to solidify its economic position within the world. The renewal was also significant because the security alliance was extended indefinitely. This was good because Japanese leaders would no longer have to worry about negotiating a new treaty once it had expired and more importantly would not have to deal with the Japanese public. However, many thought this meant that Japan would have a harder time of coming out from under the wing of the United States when it chose to do so.⁸³

5. Return of Okinawa to Japan

In 1951, the U.S.-Japan Security Treaty gave complete control of the Ryukyu Islands to the United States. Shortly after the signing of the treaty, Prime Minister Yoshida stated that Okinawa, the largest of the Ryukyu Islands, would become the biggest cause of "pain and anxiety" in the U.S.-Japanese relationship.⁸⁴ It was not until 1965 that the reversion of the islands became a major issue. This was caused by the Vietnam War and Japan's desire to keep out of it. The problem existed because Japan did not want the United States to use Okinawa as a staging point for military operations because it feared a retaliatory attack would inevitably occur. Prime Minister Sato had to present a solution that would satisfy both: (1) the United States' strategic thinking; and (2) the Japanese public.⁸⁵

⁸² Kobun Ito, "Japan's Security in the 1970's," *Asian Survey* 10, no. 12 (December, 1970): 1031.

⁸³ *Ibid.*, 1035.

⁸⁴ Makota Takizawa, "Okinawa: Reversion to Japan and Future Prospects," *Asian Survey* 11, no. 5 (May, 1971): 496.

⁸⁵ Hong N. Kim, "The Sato Government and the Politics of Okinawa Reversion," *Asian Survey* 13, no. 11 (November, 1973): 1021.

This was evident when Prime Minister Sato, under intense political and social pressure, put off directly dealing with the Okinawa issue by implementing a non-committal policy.⁸⁶ He focused more on a timeline for the return of Okinawa as opposed to how and under what circumstances it would get returned. Naturally, opposition parties jumped on Prime Minister Sato's lack of commitment to the issue and forced him to change his policy. However, in 1969 President Nixon and Prime Minister Sato agreed on the basic terms of the Okinawa reversion. They included: (1) total return of Okinawa by 1972; (2) U.S. association with Okinawa would be delineated through the Treaty of Mutual Cooperation and Security; (3) reversion would be carried out in a manner consistent with the policy of Japanese government; (4) removal of nuclear weapons would not occur without first consulting the U.S. government; and (5) reversion "should not hinder the effective discharge of the international obligations assumed by the United States."⁸⁷

Finding an acceptable balance between the two oppositely positioned poles, U.S. strategic thinking and the Japanese public, was finally accomplished in 1972 when the President Nixon and Prime Minister Sato completed the final administrative jurisdiction turnover of Okinawa on May 15th. The Okinawa reversion was significant because it showed that Prime Minister Sato was very careful not to jeopardize Japan's relationship with the United States by succumbing to the internal pressures that demanded the return of Okinawa to Japan. He carefully weighed the sentiment of the Japanese public against the security requirements of the United States. However, in the end, the concessions he made favored the United States because this ensured a better working relationship between the two countries. This ensured Japan would continue to benefit from the security provided by the United States and not develop its own defense program.

⁸⁶ Hong N. Kim, "The Sato Government and the Politics of Okinawa Reversion," *Asian Survey* 13, no. 11 (November, 1973): 1024.

⁸⁷ *Ibid.*, 1027.

6. Normalization of Relations with China

In 1951, Japan not only signed the security treaty with the United States, but also signed a separate treaty with Taiwan that stated it was the officially recognized government of China. This action pitted the United States and Japan against Mao Zedong's communist China. However, in 1970 the United States changed its negative stance against mainland China when it was given permanent membership in the U.N. in 1971. Six years later, in 1978, Tokyo and Beijing signed the China – Japan Peace and Friendship Treaty finally normalizing relations between the two countries.

Japan's normalization of relations with China was significant because in the long run, Japan knew it would have to deal with mainland China—regardless of governmental ideology. China has remained the biggest security threat to Japan since its atomic bomb test in 1964 and has been a catalyst for the debates concerning the development of a Japanese nuclear weapons program. The normalization of relations meant that Japan would face the threat and attempt to establish constructive political relations to prevent possible regional instability.⁸⁸

C. ECONOMIC/TECHNOLOGICAL FACTORS

1. Economic Factors

Economically, Japan's concerns revolved around three issues. The first issue was how the development of a nuclear weapons program would directly affect Japan's established civilian nuclear program and nuclear commercial enterprises. Second, Japan's economy was facing internal and external reforms. Therefore, it could not afford to spend vast amounts of money on the development of a nuclear weapons program. Finally, Japan's lack of intentions to develop a nuclear weapons program were transparent when considering the decreasing amounts of money it was spending on national defense.

⁸⁸ McLain, *Japan: A Modern History*, 608.

a. *Limiting Internal and External Reforms*

By the late 1960's, Japan had not only solidified its position as a cornerstone in the international market, but had a growth rate that some predicted would enable its gross national product (GNP) to eventually exceed that of the United States.⁸⁹ Japan was able to accomplish these economic gains because of large, persistent trade surpluses created by its highly educated and well-motivated labor force and high protective tariffs and other trade barriers. In 1971, President Nixon's New Economic Policy (NEP) targeted these international trade surpluses by: (1) reevaluating major currencies to the dollar; (2) reducing the discrimination against U.S. goods; (3) sharing defense burdens; and (4) creating greater flexibility in exchange rates.⁹⁰

The NEP was significant because it had come at a time when Japan's economy had failed to meet projected numbers and it caused Japan to re-structure its economic system.⁹¹ As a result, Japan initially focused its efforts inward by reducing personal income taxes and passing measures to aid small Japanese firms to direct their efforts from export production to the domestic market.⁹² The government also committed more money to better the social infrastructure and provided more services to the public—such as improving the national welfare system. The goal of public investment was to fill the void that Japan's economy would initially experience as it addressed sectors of the economy that were neglected during the economic boom.

Japan's high growth rates could also be attributed to the fact that the yen was extremely overvalued against the U.S. dollar. Taking advantage of this fact, Japan had dramatically increased its position in the U.S. market by exporting a large number of

⁸⁹ Wilbur F. Monroe, "Japan's Economy in the 1970's: Implications for the World," *Pacific Affairs* 45, no. 4 (Winter, 1972-1973): 508. The GNP growth rates experienced by the late 1960's had increased to 12.2%.

⁹⁰ Beryl W. Sprinkel, "Further Expansion and Less Inflation in 1972," *The Journal of Business* 45, no. 1 (January 1972): 4.

⁹¹ Monroe, "Japan's Economy in the 1970's: Implications for the World," 512. Some argued a restructuring of the economic system was evitable because Japan was not able to improve the system while they were experiencing the astronomical growth rates during the 1950's to 1960's. The argument stated that Japan's current structure would have eventually collapsed under the growth rates it was experiencing because it was not able to evenly distribute the growth to all sectors.

⁹² *Ibid.*

its manufactured goods. However, President Nixon's NEP charged a 10% import surcharge and realigned all the world's currencies to the U.S. dollar. But probably the most significant consequence of the NEP, and subsequent change in the Japanese economic system, was the revaluation of the yen. This brought down Japan's growth rate considerably, but it soon recovered and the economic system that resulted was better suited to deal with changes in the international market system.⁹³ The culmination of these factors meant Japan was not economically interested in developing new, unknown programs like nuclear weapons.

b. National Defense Spending

With the United States spreading its resources and presence throughout the region (North Korea and Southeast Asia) the need for Japan to step up its responsibilities was of great concern to the United States. Although Japan's GNP had risen dramatically during the period 1951-1971, its rate of spending on defense had decreased.⁹⁴ This fact supports the claim that Japan was less concerned with war and defense than it was about economic development. As long as Japan maintained its security relationship with the United States, it could continue to decrease the amount it spent on national defense.

The following table (Table 1) shows Japan's defense spending as a percentage compared to its GNP and national budget.⁹⁵

⁹³ Monroe, "Japan's Economy in the 1970's: Implications for the World," 515.

⁹⁴ Paul F. Langer, "Japanese National Security Policy-Domestic Determinants," *Rand Corporation* (June, 1972): 64.

⁹⁵ *Ibid.*, 64.

Fiscal Year	GNP (in billion ¥)	National Budget Expenditures (Total Expenditures)	Defense Expenditures (in billion ¥)	Defense Expenditures as % of GNP	Defense Expenditures as % of National Budget
1951	5436.8	793.7	126.6	2.33	15.95
1952	6236.8	923.5	182.6	2.93	19.58
1953	7343.7	1027.3	125.5	1.71	12.21
1954	7843.7	999.9	135.0	1.72	13.51
1955	8785.0	1013.3	134.9	1.54	13.31
1956	9892.4	1089.7	142.9	1.44	13.11
1957	11206.5	1184.6	143.6	1.28	12.12
1958	11518.2	1333.1	148.5	1.29	11.14
1959	13377.2	1512.1	155.6	1.16	10.29
1960	16046.9	1965.2	160.0	1.00	9.07
1961	19307.7	2107.4	183.5	0.95	8.71
1962	21189.7	2563.1	213.8	1.01	8.34
1963	24726.2	3056.8	247.5	1.00	8.10
1964	28585.8	3340.5	280.8	0.99	8.41
1965	32650.4	3658.1	301.4	0.92	8.24
1966	38117.9	4314.3	340.7	0.89	7.90
1967	44801.5	4950.9	380.9	0.85	7.69
1968	52788.2	5818.6	422.1	0.80	7.25
1969	62433.3	6739.6	483.8	0.77	7.18
1970	73240.0	7949.8	569.5	0.78	7.16
1971	84320.0	9414.3	670.9	0.80	7.13

Table 1. Relative Importance of Japanese Defense Expenditures (In billion ¥). (From: Paul F. Langer, "Japanese National Security Policy-Domestic Determinants," *Rand Corporation* (June, 1972): 64)

From this data one can see that the amount of money spent on defense increased, but the actual percentage as compared to its GNP and national budget

decreased (one can argue that Japan's Defense expenditure generally hovered around 1%). This was due to an always present negative public sentiment towards the re-creation of a military war machine for either domestic or international purposes.⁹⁶ The negative public sentiment was supported by the no-war Constitution and political opposition groups that advocated unarmed neutrality. Because of these political opposition groups, each with its own leader who operated semi-autonomously and diffused the amount of power needed to make substantial defense changes, it was unlikely that the negative trend in defense spending at that time would change anytime soon.⁹⁷

2. Technological Factors

Based on the 1968/1970 Report, Japanese officials decided it was in their best interest to sign the treaty because they would still maintain the economic ability to support the development of a nuclear weapons program—if they chose to do so at a later date.⁹⁸ Additionally, by signing the treaty, they would maintain access to the technology and materials to not only keep their civilian nuclear power plants operational, but continue to advance their nuclear weapons programs.

However, Japan's commercial sector was concerned about signing the NPT because of the effects it would have on its civilian nuclear program. Specifically, Japan was concerned about the inspections required by Article III of the NPT. The first issue under Article III states:

Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system, for the exclusive purpose of verification of the

⁹⁶ Paul F. Langer, "Japanese National Security Policy-Domestic Determinants," *Rand Corporation* (June, 1972): 21.

⁹⁷ *Ibid.*, 24.

⁹⁸ Kase, "The Costs and Benefits of Japan's Nuclearization: An Insight in the 1968/1970 Internal Report," 55.

fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.⁹⁹

To Japanese scientists, this Article inferred that Japan might be subjected to inspections requiring the shutdown of an operational reactor. The starting up and shutting down of reactors would lead to an inefficient use of uranium fuel and increases the chances that complications might arise during operation.¹⁰⁰ Additionally, uranium costs money and Japanese scientists, along with Japanese businessmen, argued this was money that did not need to be spent. Instead, Japanese businessmen looked toward the future of nuclear development and the advancement of the program. The FY1967 national budget allotted \$43 million for nuclear development. That was a 20% increase from the FY1966 budget. Additionally, the government had promised a minimum \$16 million increase for the following years.¹⁰¹ These improvements were for the addition of fast breeder reactors and future fuel processing plants. Both were intended to decrease Japan's dependence on foreign assistance for nuclear materials and equipment by increasing the efficiency of their reactors while being able to develop and process their own fuel.¹⁰²

D. SOCIAL FACTORS

The Japanese public at that time was still constrained by the psychological atmosphere of post-war Japan and heavily influenced by political policies and decisions. The aversion to war and subsequently nuclear weapons, came from the following three beliefs: (1) that military power was no longer the decisive factor in ensuring a nation's security and that, at least for Japan such power might well be counterproductive; (2) that a Japanese defense buildup, even if modest, might lead to a revival of militarism and the

⁹⁹ "Treaty on the Nonproliferation of Nuclear Weapons," *Federation of American Scientists*, 01 July 1968, <http://www.fas.org/nuke/control/npt/text/npt2.htm> (accessed 04 August 2007).

¹⁰⁰ George H. Quester, "Japan and the Nuclear Non-Proliferation Treaty," *Asian Survey* 10, no. 9 (September, 1970): 767.

¹⁰¹ Langer, "Japanese National Security Policy-Domestic Determinants," 63.

¹⁰² *Ibid.*, 43. Although the civilian nuclear national budget data is from FY1967, one can infer that the budget for nuclear development continued to increase because Japan started up eleven reactors in the period between 1970-1978. Hokkaido Electric Power Company, "Nuclear Power Plants – Japan," *Nuclear Tourist.com*, <http://www.nucleartourist.com/world/plant4.htm> (accessed 22 November 2007).

repression of civil rights; and (3) that the Japanese people did not need to fear an external threat so long as they sought to live in peace with their neighbors and did not provoke them through re-armament and foreign military entanglements.

As long as Japan continued to depend on the protective screen provided by the United States, there was not any reason to change its military posture and Japan would continue to develop politically, socially, and economically. More importantly, the U.S.-Japanese security treaty solidified the three beliefs stated above. In 1960, 60% of the Japanese public considered the pact with the United States as having played a major role in allowing Japan to develop economically and socially.¹⁰³

This was reinforced by numerous opinion polls focused on the possible development of an offensive natured Japan. In 1970, the *Shukan Asahi* conducted a poll asking whether or not Japan needed a great military before it could be considered a great nation. The results were collected from two groups, a young and old group, and were applied to a scale where 3 represented “can’t say,” 4 is “disagree,” and 2 stands for “agree.” The younger group was rated at 3.3, closer to disagreeing with the statement, and the older group was rated at a 2.9, closer to agreeing with the statement. Additionally, another poll conducted by the Japanese government in 1971 asked if Japan should even possess a Self-Defense Force (SDF). The negative replies to the polls broke the down as follows: 20 to 29 years old: 45%; 30 to 39 years old: 37%; 40 to 49 years old: 31 percent; 50 to 59 years old: 25%; over 60 years old: 22%.¹⁰⁴

The results from both of these polls were similar in that they discredited the beliefs made by sociologists from the mid 1960’s. They predicted that the negative sentiment towards rearmament and re-militarization would be replaced by a mindset that was removed from the nuclear atrocities experienced during World War II.¹⁰⁵ Therefore, they would not have the same aversions to war and re-armament and when they came to prominence within society, they would make decisions without regard to what happened in the past. The sociologists stated that these Japanese who were too young to have been

¹⁰³ Langer, “Japanese National Security Policy-Domestic Determinants,” 7.

¹⁰⁴ *Ibid.*, 10.

psychologically affected by the war would not be affected by the same memories as their parents or elders. However, polls conducted in the early 1970's asked the same questions concerning rearmament, remilitarization, and the nuclearization of Japan. Similar to previous polls, they produced the same results.¹⁰⁶

E. CONCLUSION

Japan ratified the NPT in 1976, six years after its initial signing. A series of debates filled the six-year period as Japan decided whether or not the incentives to become a member of the NPT outweighed the incentives of remaining outside the treaty. This chapter analyzed the various political, economic, and social incentives that caused Japanese leaders to eventually ratify the NPT and forego the development of a nuclear weapons program. This chapter determined that the following factors heavily influenced Japanese leader's opinions to forego the development of a nuclear weapons program.

Politically, Japan was prohibited from developing a nuclear weapons program because of pre-existing treaties, alliances, documents, and policies. The U.S.-Japan Security Treaty that was initially signed in 1951 and was re-signed in 1960 in the form of the Treaty for Mutual Cooperation and Security. Ten years later, the United States and Japan re-affirmed this treaty indefinitely. This meant that Japan could continue to funnel their resources towards the development of other sectors while under U.S. protection. In addition to the U.S.-Japan security alliance, Japan conducted its own assessment to determine if it was advisable for it to develop its own nuclear weapons program. The 1968/1970 Internal Report advised that Japan strengthen its alliance with the United States because external and internal factors would not support the development of a nuclear weapons program. Therefore, Japan's political apparatus's future decisions were heavily influenced by the reaffirmation of the alliance and the results of the internal report.

¹⁰⁵ Yasumasa Tanaka, "Japanese Attitudes Towards Nuclear Arms," *The Public Opinion Quarterly* 34, no. 1 (Spring, 1970): 28.

¹⁰⁶ Yasumasa Tanaka, "Japanese Attitudes Towards Nuclear Arms," *The Public Opinion Quarterly* 34, no. 1 (Spring, 1970): 29.

Economically, Japan decided not to develop a nuclear weapons program because of three issues. First, Japan wanted to concentrate on the future development of its civilian nuclear program. The addition of technologically advanced reactors and future reprocessing plants would mean less dependence on foreign assistance—something it will always suffer from due to its limited resource capabilities. Second, few could have predicted the economic success Japan experienced in such a short period of time and the effects it would have on the internal economic infrastructure and international community. Therefore, few were surprised when Japan, and the international community, decided to focus on plans and programs aimed at reforming Japan's economic infrastructure and how it interacted with the international markets. Lastly, Japan's defense spending had dramatically decreased since it re-gained sovereignty in 1951. The trend is defense spending was unlikely to change as long as there were no-war policies and a public aversion towards nuclear weapons.

Most Japanese did not believe that Japan required a military force commensurate with its international economic standing to be considered a great nation. Second, most Japanese believed that a defense buildup might lead to a revival of militarism. This in turn would lead to the suppression of the civil rights Japanese had worked hard to possess. During the period analyzed, Japan reformed not only its economic infrastructure, but initiated social programs that had been non-existent since the late 1920's. Lastly, the development of a nuclear weapons program would only provoke additional states to do the same. Stability in the region was seen to be assured with a non-nuclear Japan.

IV. CASE STUDY III: POLITICS, ECONOMICS, AND SOCIETY, OF 1993 TO 2007

A. INTRODUCTION

Although there was not much talk about Japan re-militarizing and developing nuclear weapons during the 1980's, emerging political, economic/technological, and social factors contributed to the eventual debates that re-commenced in 1998 and that are occurring today. Japan anticipated that the end of the Cold War would bring with it a reduction of nuclear weapons as the sole remaining superpower, the United States, would usher in a period of international peace, democracy, and good will.¹⁰⁷ Instead of eliminating current nuclear stockpiles, the United States had to turn its attention to an international landscape scarred with conflicts between India and Pakistan, China and Taiwan, and on the Korean Peninsula.

The conflicts were significant because they all occurred within or near the Far East region. However, it was not only these specific conflicts that tested Japan's long-standing abstention from re-militarizing and developing nuclear weapons. In 1991, the United States expanded Japan's area of concern to include the Middle East. Japan was reluctant to engage the Far East region, and even more reluctant to engage the international community, but the United States led Japan into a war it would otherwise have watched from the sidelines. Japan's increasing standing within the international community necessitated a response proportionate to other world leaders. However, Japan's actions failed to impress the international community as it addressed the problem through economic support alone, as opposed to diplomatic or military support.¹⁰⁸

These actions drew much criticism from the international community. Reluctantly, Japan capitulated to the wishes of the international community and began to

¹⁰⁷ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 226.

¹⁰⁸ Inoguchi Takashi, "Japan's Response to the Gulf Crisis: An Analytic Overview," *Journal of Japanese Studies* 17, no. 2 (Summer 1991): 258.

allow deployment of its Self-Defense Forces (SDF) to participate in peace-keeping operations (PKO) in Kuwait. Japan contributed military forces under the following five conditions: (1) existence of a cease-fire agreement; (2) an invitation from the host country; (3) impartiality of the operations; (4) withdrawal of Japanese forces if its government deemed necessary; and (5) minimum use of force required for troop protection.¹⁰⁹ This conditional involvement in PKO helped to quiet the critics within the international community that contended Japan was not doing enough while simultaneously quieting the critics within its domestic community that contended Japan was being asked to do too much.

However, in 1994 Japan once again openly discussed the possibility of developing a nuclear weapons program. These discussions were influenced by North Korea's continued defiance of NPT norms and Nodong missile test in 1993.¹¹⁰ Additionally, Japan faced internal political pressures to sign an indefinite extension of the NPT. Amidst these debates, Japanese officials conducted another secret investigation to determine Japan's ability to develop a nuclear weapons program. The study, similar to the 1968/1970 Report, emboldened Japan's non-nuclear position. However, the basis for the decision was not its lack of economic or technological support, but instead it was a lack of internal and external political and social support. Therefore, Japan supported the indefinite extension of the NPT.

During the years of 1998 to 2007, the renewed debates over whether or not Japan should develop nuclear weapons recommenced after North Korea conducted missile tests over the Sea of Japan in 1998. In 2006, Prime Minister Shinzo Abe enters office with a conservative, nationalist agenda and an apparent willingness to revise the Constitution and reopen the nuclear issue. Supporters for the development of a nuclear weapons program, such as former Foreign Minister Taro, have argued that preexisting treaties and alliances are no longer relevant to the current debates. Their argument is based on the following factors: (1) the norms and institutions established to prevent the proliferation of

¹⁰⁹ Campbell, Einhorn, and Reiss, eds., *The Nuclear Tipping Point: Why States Reconsider Their Nuclear Choices*, 226.

¹¹⁰ "Weapons of Mass Destruction Around the World," *Federation of American Scientists*, 16 November 2006, <http://www.fas.org/nuke/guide/dprk/nuke/index.html> (accessed 12 March 2007).

nuclear weapons have deteriorated since Japan's initial signature; (2) the current U.S.-Japanese strategic arrangement—the nuclear umbrella—has holes; (3) nuclear weapons would provide Tokyo with the tools necessary to become a global superpower; (4) China's increasing global influence; and (5) nuclear instability within the region.

Conversely, opposition leaders, such as Hirotaka Otaki and Ichiro Ozawa, have argued that the development of a nuclear weapons program would do more harm than good. They have argued that the U.S.-Japan security alliance adequately addresses the concerns of a rising Chinese regional presence and instability from North Korea. Additionally, the U.S.-Japan security alliance ensures that Japan can continue to affirm its position within the international community politically and economically and therefore will not have to deal with external aggressors with military force.

Similar debates that occurred three previous times in Japan's history produced a nuclear-weapons-free Japan. However, the stakes of remaining non-nuclear are much greater today for two reasons. The first reason is that Japan has evolved into a country that is ready to restructure its “father-son” relationship with the United States and address public's pressure for independence. Increased calls for nationalism, along with its economic and political stature within the international community not only warrant a change, supporters argue, but require it. This can be seen as Japan looks to operate without the assistance/guidance of the United States—as was evident when new Prime Minister Shinzo Abe visited China before coming to the United States. The second reason is that the international institutions, treaties, and constitutions that ultimately produced a nuclear-weapons-free Japan have deteriorated in such a way that framework is no longer recognizable and even less effective. This can best be seen when countries like India, Pakistan, and Israel continue to develop nuclear programs. These cases concern Japan because seemingly little has been done to force the dismantlement of the programs and in some cases, like India, the United States has actually made provisions to advance its program.

The focus of this chapter was that, despite the arguments to obtain a nuclear weapons program Japan will continue to abstain from developing a nuclear weapons program. This decision will be made despite North Korea's continual development and

testing of its own nuclear weapons program and China's increasing military presence in the region. The decision to abstain from developing nuclear weapons was based on a series of political, economic/technological, and social factors. These factors include: (1) a reliance on the U.S.-Japan security alliance and the nuclear umbrella it provides; (2) faith in the rules and doctrines of international treaties that support the non-proliferation of nuclear weapons; (3) lack of motivation by the Japanese politicians and society to accept the responsibilities of a nuclear state; and (4) lack of economic support due to the fact the Japanese economy was recovering from the Asian economic crisis of 1997. The main point of this chapter draws out the specific issues in each of these factors.

B. POLITICAL FACTORS

The Japanese Defense Agency conducted a report in 1995 to determine whether the incentives to remain a non-nuclear state outweighed the disincentives to develop a nuclear weapons program. The following results not only explained why Japan decided to remain a non-nuclear state in the face of signing the indefinite extension of the NPT, but also help explain why Japan will remain a non-nuclear state despite the increasing instability from North Korea and the rising Chinese influence in the Far East region.

The first factor that dissuaded Japan from developing a nuclear weapons program was the fact it would destroy the military balance in Asia and possibly prompt an arms race with China. This was significant because not only would it upset the military balance within the region, but it could increase the chances of causing a nuclear chain reaction that would prompt other regional countries to seek the development of their own nuclear weapons program. Additionally, a nuclear Japan would validate North Korea's continued development of its own nuclear weapons program and justifies its open defiance of established treaties, laws, and norms established to prevent proliferation. For Japan to develop its own nuclear weapons program would also require a defiance of the same treaties, laws, and norms that currently attempt to control North Korea's nuclear ambitions. That is because the international community, specifically the United States, does not want to see either North Korea or Japan as a nuclear weapons state.

The second factor that persuaded Japan to remain a nuclear-weapons-free state was its role in the NPT. This was significant because Japan was the only member to have suffered a nuclear attack and therefore has been adamant against the proliferation of nuclear weapons. The fact that Japan has been the only state to have suffered from a nuclear weapons attack helps validate its reasoning for other states not to develop nuclear weapons—Japan can draw attention to the atrocities and the years of hardship it suffered as it rebuilt its cities. Additionally, as a major NPT signatory state that does not possess nuclear weapons, Japan can demonstrate to other nuclear-aspiring states that possession of nuclear weapons does not translate into political and economic success. From its current position within the NPT, Japan demonstrated that success can be achieved without a powerful military.

But the NPT was not the only element in place to avert Japan's proliferation of nuclear weapons. Japan's membership in such non-proliferation organizations as the International Atomic Energy Agency (IAEA), Nuclear Suppliers Group (NSG), and the Zanger Committee helped to solidify the international non-proliferation regime. These agencies, coupled with treaties that sought to prevent the development of nuclear weapons programs and numerous nuclear-weapons-free zones, comprise a non-proliferation regime that depends on Japanese membership.¹¹¹ Again, Japan's membership decreases the likelihood that nuclear-aspiring countries would follow through with the development of their own nuclear weapons program.

The third factor that dissuaded Japan from developing nuclear weapons was the fact that it would destroy faith in the U.S. security relationship and the nuclear umbrella it provided the region. The nuclear umbrella not only covers Japan, but also South Korea and Taiwan. Many have argued that Japan's abstinence from developing nuclear weapons in the past was due to the security relationship with the United States and the dependence on its nuclear weapons.¹¹² Not only was this true in the past, but this fact was the biggest reason why Japan developed its own nuclear weapons program in the future. If Japan

¹¹¹ "Arms Control Today," *Arms Control Association*, October 2007, <http://www.armscontrol.org/treaties/> (accessed: 15 October 2007).

were to develop its own nuclear weapons program, it would do so only with the support of the United States. Alienating the United States would not only jeopardize its future security (as other countries might be more apt to pick on them for not having the United States to back them up) but Japan would also jeopardize the economic and technological assistance they received because of their relationship with the United States—economic assistance in terms of access to the U.S. market and technological assistance in terms of nuclear energy.¹¹³

The fourth factor that persuaded Japan not to develop its own nuclear weapons program was its belief that the United States and the region's major players would not allow continued defiance and instability from North Korea. The missile launches and nuclear testing not only affect Japan and the region, but the whole international community. After North Korea declared its nuclear bomb test in October 2006, U.S. Secretary of State Condoleezza Rice quickly visited China with three goals in mind. The first was to implement the United Nations Security Council's Resolution (UNSCR) 1718. This resolution would impose sanctions against North Korea for testing its nuclear weapon. Although this had been used in the past, the resolution had failed to prevent North Korea from testing nuclear weapons because not all the countries in the region (China and South Korea) supported sanctions against North Korea. Conversely, those countries that did support the use of sanctions, interpreted the resolution differently. To prevent either of these issues from re-occurring, Secretary Rice explained the importance of all countries being on the same page.¹¹⁴ The region eventually understood the seriousness of the nuclear test as China agreed to inspect cargo ships headed for North Korea.¹¹⁵

¹¹² Anthony DiFilippo, "Can Japan Craft an International Nuclear Disarmament Policy," *Asian Survey* 40, no. 4 (July – August 2000): 574.

¹¹³ This thesis does not claim that if Japan were to sever ties with the United States, it would no longer have access to the international markets. However, the United States and Japan are vital trading partners and severing the security relationship would undoubtedly affect their economic relationship.

¹¹⁴ "North Korea Claims Nuclear Test," *BBC News Online*, 09 October 2006, <http://news.bbc.co.uk/2/hi/asia-pacific/6032525.stm> (accessed 15 October 2007).

¹¹⁵ "U.S. officials: North Korea may be planning 2nd test," *CNN.com*, 17 October 2006 <http://www.cnn.com/2006/WORLD/asiapcf/10/17/nkorea.sanctions/index.html> (accessed 22 November 2007).

The second goal of Secretary Rice was to ensure all regional members were aware of the United States' security commitment to its allies. Specifically, she was referring to Japan because the international community was nervous of Japan's reaction to North Korea's nuclear bomb test. However, if the United States declared continued responsibility for Japan's security, Japan would not have to resort to finding other means to protect itself—Secretary Rice was explicitly referring to Japan developing its own nuclear weapons program. The final goal was to revive the stalled Six-Party Talks. Secretary Rice met with Chinese president Hu Jintao and insisted that the United States wanted to find a resolution without the use of military force.¹¹⁶ However, in order for the United States and its allies to do this, she stressed how important it was for China to take a major role in the process.

China responded by taking a more active diplomatic role in the negotiations. Additionally, China has opened communications with Pyongyang, acting as a point of contact for both North Korea and the international community.¹¹⁷ This provides an arena for both sides to express their wants and needs. These communication efforts have resulted in diplomatic negotiations that have produced a less military postured North Korea when dealing with the international community. More importantly, these talks have paved the way for energy and food support for North Korea. All of this benefits the international community as it increases the chances that there exists a more stable North Korea. Specific to China is the fact that a collapsed North Korean state would send an influx of refugees into neighboring Chinese territories.¹¹⁸

The sanctions and group communication efforts directed towards the denuclearization of North Korea culminated with the declaration of a Denuclearization Action Plan in February 2007. This was significant because the international community was able to convince North Korea to cease further development of its nuclear weapons

¹¹⁶ "Sanctions Against North Korea," *Global Policy Forum*, <http://www.globalpolicy.org/security/sanction/indexkor.htm> (accessed 15 October 2007).

¹¹⁷ "Pragmatism the Key to Unlock Nuke Stalemate," *China Daily Online*, 23 October 2006.

¹¹⁸ Phillip C. Saunders, "What to Expect from the Six-Party Talks on the Korean Nuclear Crisis," Center for Nonproliferation Studies Online, 25 August 2003, <http://cns.miis.edu/pubs/week/030825.htm> (accessed 15 October 2007).

program and to agree to shut down its nuclear operations at the Yongbyon nuclear facility. These actions, in addition to other actions specifically aimed at denuclearization, opened negotiation opportunities between the United States and North Korea. Additionally, Japan has agreed to open dialogue with North Korea aimed at resolving historical issues.¹¹⁹

The fifth factor that prevented Japan from developing nuclear weapons during this period was the appointment of Prime Minister Yasuo Fukuda. Considered a moderate on international affairs, said he would improve ties with Asia, maintain the U.S.-Japan security relationship, and provide assistance to rural areas throughout Southeast Asia.¹²⁰ But how will Prime Minister Fukuda address those international affairs that have caused angst throughout the Far East Asian region—specifically North Korea’s nuclear weapons program? Prime Minister Fukuda saw the North Korean nuclear issue as a means to solve other issues, like the abduction of Japan citizens.¹²¹

Prime Minister Fukuda’s appointment was significant because it represented a shift in how Japan would deal with international and internal affairs. Internationally, where former Prime Minister Abe used his inaugural world tour as a means to forcefully display Japan’s pressing issues, Prime Minister Fukuda took a friendlier diplomatic stance.¹²² Internally, Prime Minister Fukuda inherited a political system that is deeply divided and must mend the damages inflicted by the bold diplomatic practices of former Prime Ministers Koizumi and Abe.

The final factor that dissuaded Japan from developing a nuclear weapons program was best summarized by Bruce Bueno de Mesquita:

In the 35 years since the beginning of the nuclear era, managers of the foreign affairs of the United States have devised two clear-cut policies that

¹¹⁹ “North Korea – Denuclearization Action Plan,” *U.S. Department of State*, 13 February 2007 <http://www.state.gov/r/pa/prs/ps/2007/february/80479.htm> (accessed 23 November 2007).

¹²⁰ “Fukuda Fills Key Posts in Japan’s Liberal Democratic Party,” *International Herald Tribune.com*, 24 September 2007 <http://www.ihf.com/articles/2007/09/24/news/japan.php> (accessed 22 November 2007).

¹²¹ “Bush Cites Progress in North Korea Nuclear Talks,” *MSNBC.com*, 16 November 2007 <http://www.msnbc.msn.com/id/21834298/> (accessed 23 November 2007).

¹²² “Fukuda Takes Softly-Softly Approach,” *Daily Yomiuri Online*, 23 November 2007 <http://www.yomiuri.co.jp/dy/national/20071123TDY03103.htm> (accessed 23 November 2007).

defend itself from a nuclear weapons attack. They are (1) the maintenance of a stock of weapons and delivery systems that at least allows for retaliation against any potential nuclear attack and (2) the discouragement of the proliferation of nuclear weapons among countries hitherto not so armed.¹²³

The significance of Bueno de Mesquita quote is that even if Japan developed a nuclear weapons program and maintained a stockpile of nuclear weapons, it would still fail to possess a nuclear weapons capability that could be considered an effective deterrent against possible nuclear aggressors. This is because, in order to be effective, Japan's nuclear weapons capabilities would have to sufficiently deter its potential adversaries. The idea is that if two countries involved in a conflict possess comparable nuclear weapons arsenals, neither country would use them out of fear of irrevocable destruction—the incentives to use nuclear weapons do not outweigh the disincentives.¹²⁴ To support this statement, one just has to look at geography. If a country were to attack Japan, the likely targets would be its industrial nodes. Because Japan is not a big country, it would not take a large arsenal to accomplish this task. Therefore, one can reason that Japan would not be able to survive a nuclear attack to attempt any organized and effective retaliation of its own—regardless of the amount of nuclear weapons it possessed.¹²⁵

C. ECONOMIC/TECHNOLOGICAL FACTORS

1. Economic Factors

Japan faced heavy criticism from the international community that targeted the exploitation of their strong economic systems and how Japan responded to international affairs. The first issue concerned the heavy trade imbalances Japan has established with

¹²³ Bruce Bueno de Mesquita and William H. Riker, "An Assessment of the Merits of Selective Nuclear Proliferation," *The Journal of Conflict Resolution* 26, no. 2 (June 1982): 283.

¹²⁴ *Ibid.*, 287.

its leading trading partners—particularly the United States. This was significant because a soured economic relationship would undoubtedly affect the U.S.-Japan security relationship. The second issue was the application of checkbook diplomacy when Japan was confronted with taking a proactive stance within the international community and its affairs. This section looks at how these two economic issues contributed to Japan's decision not to develop a nuclear weapons program.

a. Trade Issues

The United States and Japan have established themselves as two of the world's most vital economies. The two countries achieved this position because of a vigorous trade relationship based on the similar principles of economic and political stability and market-driven economies.¹²⁶ Japan is the United States' fourth largest trading partner, importing and exporting a total of \$207.7 billion at the end of 2006.¹²⁷ Unfortunately, there exists a huge trade imbalance that totaled—\$88.6 billion. The imbalance occurred because of unfair trade policies that benefited Japan. However, some U.S. political economists have argued that Japan just out-competed the United States within the international markets.¹²⁸

The United States and Japan have worked hard to overcome their differences and create policies that would benefit both countries. In 2005, Wendy Cutler, the U.S. trade representative to Japan, Korea, and ASEAN, emphasized the importance of settling their economic disputes and looking to do so in ways that would benefit both

¹²⁵ One can argue that Japan would be able to deploy a retaliatory nuclear attack because its nuclear weapons cache would likely exist in hardened bunkers or on ballistic missile submarines. However, Japan would not be able to absorb a nuclear attack to its industrial nodes, therefore decreasing the effectiveness of its retaliatory capabilities. This is because an attack on the Japan's industrial nodes would render their command and control systems inoperable.

¹²⁶ "U.S.-Japan Economic Ties: Status and Outlook," *Open Congressional Research Service*, 30 September 2003, <http://openocrs.cdt.org/document/IB97015> (accessed 15 October 2007). The United States and Japan are in the top of many indexes that ranks a countries' economy according to GDP, Income per capita, and PPP.

¹²⁷ "Foreign Trade Statistics: Top Trading Partners – Total Trade, Exports, and Imports," December 2006, <http://www.census.gov/foreign-trade/statistics/highlights/top/top0612.html> (accessed 15 October 2007).

¹²⁸ William H. Cooper, "U.S.-Japan Economic Relations: Significance, Prospects, and Policy Options," Congressional Research Service, RL32649 (09 July 2007): 6.

countries.¹²⁹ Japan, a country that does not easily change established laws and institutions, implemented a series of proposals aimed at bettering trade relations with the United States. The proposals include: (1) lowering retail rates for mobile telephone networks; (2) reducing customs processing fees; (3) liberalizing both its electricity and gas sectors; (4) expanding and fortifying its intellectual property rights regime; and (5) strengthening the Japan Fair Trade Commission (JFTC).¹³⁰

Despite Japan's positive actions towards correcting the trade deficiencies, it was concerned that the United States was not reciprocating efforts to decrease their economic differences. These concerns included: (1) customs regulations and practices implemented by the United States since September 11, 2001, that have proved unfavorable to Japan; (2) new U.S. government restricted regulations on the maritime industry placing size restrictions on foreign cargo ships; and (3) Japan's disagreements with U.S. anti-dumping laws.¹³¹

Japan understood that in order to maintain its economic position within the international community, it needed to smooth points of friction with the United States. It was not only important to highlight these points of friction. But how and where could these issues be resolved? U.S. policy makers presented three mechanisms. The first mechanism was the utilization of the World Trade Organization (WTO). One of the mainstays of the WTO was its ability to resolve economic disputes between countries.¹³² The advantage of this mechanism was that the WTO acts as an unbiased third party. Disputes brought to the WTO are free of the political, social, or security issues that

¹²⁹ "Signs of Progress in U.S.-Japan Trade, but Obstacles Remain," *International Information Programs: USINFO.State.Gov*, 29 September 2005, <http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2005&m=September&x=20050929140954ASesuarK0.449505> (accessed 16 October 2007).

¹³⁰ Ibid.

¹³¹ Cooper, "U.S.-Japan Economic Relations: Significance, Prospects, and Policy Options," 18.

¹³² "Understanding the WTO," *World Trade Organization Online*, February 2007, http://www.wto.org/english/thewto_e/whatis_e/tif_e/utw_chap1_e.pdf (accessed 16 October 2007).

normally hamper current economic resolution efforts between the United States and Japan. This also improved the perception that the United States' demands and requests were not unilaterally oriented.¹³³

The second mechanism was the creation of special frameworks and sector-specific agreements. The advantage of this mechanism was that it provided economic and political leaders an arena to discuss issues that, if not adequately addressed, could create economic friction. Another advantage was that the issues discussed in these framework arenas were not subject to international laws.¹³⁴ This was important because it allowed economic and political leaders to discuss issues freely and without restrictions. The final mechanism was the proposed creation of a Free Trade Agreement (FTA). The advantage of this option is that tariffs and other customs restrictions on U.S.-Japan bilateral trade are already low or non-existent, providing a foundation on which to build an FTA.¹³⁵ FTAs based on this framework can concentrate on issues that current economic policies fail to address and not worry about the restrictions that usually accompany the future execution of these policies.

b. Japan's Instruments of War

Because of Japan's lack of major military muscle—when compared to the United States or China—it has resorted to political and economic means to confront the issues that cause instability within the region. Diplomacy and economics have developed into Japan's primary means of dealing with such issues not only within the region, but throughout the international community. Unfortunately, Japan's preferred method of international diplomacy, coupled with its minimal military commitments around the world, has sometimes soured its image as a serious international player.¹³⁶ This is because many of the world's great powers have extended their resources—political, economic and military resources—to all the areas of the world. The criticism of Japan's

¹³³ Cooper, "U.S.-Japan Economic Relations: Significance, Prospects, and Policy Options," 10.

¹³⁴ *Ibid.*, 21.

¹³⁵ *Ibid.*, 22.

¹³⁶ William J. Long, "Nonproliferation as a Goal of Japanese Foreign Assistance," *Asian Survey* 39, no. 2 (March – April 1999): 344.

efforts then stems from its reluctance to engage in international affairs outside of monetary contributions. If Japan wants to be considered one of the world's great powers, then it must engage the international community in more than one facet.

Despite its continual decline in overall Official Development Assistance (ODA) contributions, Japan still exists as the world largest contributor of foreign economic assistance. This section will analyze how Japan uses its ODA contributions as a tool to secure its national security despite its lack of a major military force structure. Japan's ODA charter states that its main objective is to "contribute to the peace and development of the international community, and thereby to help ensure Japan's own security and prosperity."¹³⁷ To achieve this goal, Japan has contributed enormous amounts of money to Africa, the Middle East, and throughout Asia. Examples of these contributions include mine clearance in Cambodia, waste management in Mongolia, groundwater development in Viet Nam, infrastructure improvements in Sri Lanka, and hospital improvement in Kenya.¹³⁸ However, these examples barely cover the full spectrum of grants and aid Japan provides to the international community.

Why does Japan provide so much economic support to an international community that criticizes its efforts for not doing enough? The significance of Japan's contributions throughout the international community is that they serve as an extension to their current national and economic security policies. First, Japan uses ODA as a tool to increase its economic security and strengthen its access to markets. It does this through grants and aid packages to developing countries within the Far East and South East Asian regions. Since Japan has very limited national resources, it relies on the resources provided by these developing regions. By inducing trade between Japan and these regions, Japan secures not only resources it needs to survive, but developing trade partners that will eventually purchase its products and possibly evolve into international players.

¹³⁷ Economic Cooperation Bureau, *Japan's Official Development Assistance Charter* (The Government of Japan: Ministry of Foreign Affairs, 2003).

¹³⁸ "Exchange of Notes in Fiscal Year 2007 Grant Aid by Region," *The Ministry of Foreign Affairs of Japan*, <http://www.mofa.go.jp/policy/oda/note/grant-7r.html> (accessed 16 October 2007).

In the early 1990's, one-third of Japan's imports came from these developing regions, while one-half of these regions' exports went to Japan.¹³⁹ The positive effects of Japan's grant and aid packages can be seen as a number of less developed countries (LDC) in 1990 have become active players within the international economic community.¹⁴⁰ Additionally, the Asian Pacific Economic Cooperation (APEC) organization and the World Trade Organization (WTO) have targeted LDC countries. Their goals were aimed at developing their economies so they are no longer a burden to the international economic community. The significance of establishing relationships amongst the LDC, APEC, Association of South East Asian Nations (ASEAN), and the WTO was summarized in a Japanese Ministry of International Trade and Industry report:

Japan's relations with the less developed economies have an importance not seen in relations with other advanced nations. Whether or not the LCD economies can show healthy growth has a serious bearing on our own economy. We cannot afford to neglect friendly economic relations with the LCD. Our position is that Japan's economic cooperation is not simply an international responsibility but an unavoidable requirement of the smooth management of our own economy.¹⁴¹

With regards its national security, Japan believed that political, economic, technological, and social preeminence overcame its lack of military power. And although Japan's defense budget has grown into the world's third largest, it still looks to its economic position within the international community as its strongest diplomatic tool.¹⁴² More importantly, Japan depends on its economic position to establish trading relationships with the developing countries. If Japan develops these countries economically, this enhances the possibility of establishing additional political, trading, and technological alliances. As countries learn to depend on each other, it is less likely conflicts will arise.

¹³⁹ Xiaoming Zhou, "Japan's Official Development Assistance Program: Pressures to Expand," *Asian Survey* 31, no. 4 (April 1991): 348.

¹⁴⁰ Julio O. De Castro and Klaus Uhlenbruck, "Characteristics of Privatization: Evidence from Developed, Less-Developed, and Former Communist Countries," *Journal of International Business Studies* 28, no.1 (1st Quarter 1997): 123.

¹⁴¹ Zhou, "Japan's Official Development Assistance Program: Pressures to Expand," 348.

¹⁴² *Ibid.*, 343.

2. Technological Factors

By the end of the 1990's, Japan's civilian nuclear program was among the most advanced in the world. It was for this reason that Japan is referred to as a nuclear-ready or threshold state. However, translating civilian technologies into the development of a nuclear weapons program is a very difficult and complicated task. The purpose of this section is not to explain nuclear physics, but to discuss the fundamental components and technologies required to develop a nuclear program and show how one can directly apply the technologies involved in a civilian program and translate them into the development of a nuclear weapons program.

a. Civilian and Nuclear Program Similarities/Differences

There are three stages in developing a nuclear weapon. The first stage is the production, or acquisition, of weapons grade material. The second stage is the design and production of the warhead, integrating the plutonium/uranium core with fusing and explosives. Finally, the third stage mates the warhead to a delivery system. For the purposes of this thesis, this section will only discuss the first stage because it is the most complicated and difficult hurdle for Japanese scientists to overcome.

There are two ways to produce the weapons grade material required to develop nuclear weapons, either by the uranium or plutonium route, with each respective end product serving as a possible bomb core. First, this section will discuss the plutonium route because it is the most likely scenario for nuclear-aspiring states, such as Japan, that possess nuclear reactors. A plutonium bomb is preferred over a uranium bomb because less material is needed to produce a small nuclear weapon—5-8 grams of plutonium versus 10-25 grams of uranium.¹⁴³ To create the plutonium warhead, the uranium-235 is placed into a reactor where chain reactions occur, yielding a mixture of unspent uranium-235, irradiated uranium-238, and plutonium 238/239. The sought-after product from the chain reaction is the plutonium-239, which is removed through chemical reprocessing.

¹⁴³ Diehl and Moltz, *Nuclear Weapons and Nonproliferation: A Reference Handbook*, 204.

Specifically, plutonium-239 of a purity of 93% or above constitutes weapons-grade material. Once the plutonium-239 is extracted, it is ready for Stage 2.¹⁴⁴

The second type of warhead use uranium-235 instead. Even though there are fewer steps involved, nuclear weapons based on the uranium-235 warhead are just as difficult to produce. This is due to the high levels of uranium enrichment required to produce a nuclear weapon. The goal needed for weapons grade material is to attain uranium enrichment over 90%.¹⁴⁵ Fortunately, the enrichment process is extremely difficult and dissuades most countries from developing uranium-based warheads because the costs and equipment involved are too great and the IAEA makes it extremely difficult for states to enrich uranium to the levels required for nuclear weapons. This is important because it makes it harder for rogue states that possess the economic support, to hide their operations.¹⁴⁶

The warhead is denoted with either a gun-type mechanism, used on a uranium warhead, or the implosion method, used on the plutonium warhead. The fissile material is bombarded with neutrons and split into smaller, lighter elements. This separation causes large amounts of energy and when the subsequent smaller elements collide with more neutrons their separation will produce even more energy and additional elements. If there is enough fissile material at the beginning of the reaction to sustain the subsequent reactions, then the reaction is self-sustaining and this is called a chain reaction.¹⁴⁷

¹⁴⁴ Diehl and Moltz, *Nuclear Weapons and Nonproliferation: A Reference Handbook*, 204.

¹⁴⁵ *Ibid.*, 204.

¹⁴⁶ U.S. Congress, Office of Technology Assessment, *Proliferation of Weapons of Mass Destruction: Assessing the Risks*, OTA-ISC-559 (Washington, DC: U.S. Government Printing Office, August, 1993), 123. One can argue that states can obtain enriched uranium without possessing a nuclear reactor, thus making the U-235 warhead a more favorable option to nuclear-aspiring states. However, the point of this section is that even if a state possesses the economic means to obtain enriched uranium, organizations like the IAEA make it extremely difficult for this to occur.

¹⁴⁷ *Ibid.*, 199.

b. *Integration with Japan's Capabilities*

There are similarities between the dedicated civilian nuclear programs and the nuclear weapons programs. They include: (1) the production of fissile material; (2) the handling radioactive material; (3) familiarity with chemical processes for fuel fabrication; and (4) the design and operation of reactor and electronic control systems.¹⁴⁸ However, there are also significant differences between the two programs that make it difficult for countries to make the transition. The major differences between the dedicated civilian nuclear plants and the nuclear weapons plants are the conversion of fuel, further enrichment of uranium (to include the production of highly enriched plutonium, weapons design, and testing), and reprocessing.¹⁴⁹ However, the countries that benefit from the economic support of their civilian facilities have inadvertently closed the technological gap existing between the civilian plants and the nuclear weapons plants. Japan accomplished this by building more efficient and powerful reactors, enrichment techniques, and reprocessing plants.

(1) Reactors. Japan possesses the economic means to translate its civilian nuclear technologies and infrastructure into a nuclear weapons plant. In 1992, Japan maintained 44 power reactors that produced 34,238 total MW (e). This accounted for 23.8% of Japan's electric power. Japan currently has nine additional power reactors slated for construction. Additionally, Japan has 18 research reactors.¹⁵⁰ The nine additional reactors and the 18 research reactors are of significant concern to the international community because of the type of reactors they are, or are going to be. This is because Japan plans on producing its first wave of Advanced Pressurized Water Reactors (APWR). These types of reactors pose a greater threat to non-proliferation because of the higher concentrations of enriched plutonium by-products, namely

¹⁴⁸ U.S. Congress, Office of Technology Assessment, *Proliferation of Weapons of Mass Destruction: Assessing the Risks*, OTA-ISC-559 (Washington, DC: U.S. Government Printing Office, August, 1993), 153.

¹⁴⁹ *Ibid.*, 129.

¹⁵⁰ "Technical Aspects of Nuclear Proliferation," *Federation of American Scientists*. <http://www.fas.org/spp/starwars/ota/934406.pdf> (accessed 10 March 2007). These numbers reflect data as of 1992.

plutonium-239, that result from the normal fission process. Additionally, Japan also maintains Pressurized Heavy Water Reactors (PHWR) that produces high concentrations of plutonium-239.¹⁵¹ Finally, Japan has discussed the construction of a Fast Breeder Reactor (FBR). The benefit of this type of reactor is that it possesses a more efficient fuel consumption cycle; therefore, it produces less waste while increasing the amounts of usable plutonium-239.¹⁵² It is more efficient because it consumes fissile material at a rate less than what it produces.

(2) Processing and Enrichment Plants. Since the inception of Japan's civilian nuclear program, it has either stockpiled the plutonium received from the normal fission cycle of their reactors as spent fuel, or sent it off to get reprocessed. Of great concern to the international community is the fact Japan has stockpiled more spent fuel than it has sent to reprocessing plants in Europe.¹⁵³ Furthermore Japan recently attained the capability to reprocess its own plutonium, increasing its capability to produce weapons grade material. In 2003, Japan announced that it was constructing a new nuclear reprocessing plant, where it could draw from the growing pile of plutonium it currently stockpiles. This is of concern to the international community because Japan is now the largest producer of civilian plutonium in the world and therefore has a large amount of material available to produce nuclear weapons.¹⁵⁴ Japan conducted testing on the Rokkasho Reprocessing Plant in March 2006.

Japan argues that the facility will be used to separate the plutonium-239 from the fission waste and to create mixed-oxide fuel (MOX).¹⁵⁵ However, Japan does not currently possess any reactors that can utilize MOX; more importantly, the Japanese government has not approved construction of any reactors that

¹⁵¹ Diehl and Moltz, *Nuclear Weapons and Nonproliferation: A Reference Handbook*, 204.

¹⁵² "Liquid Metal, Fast Breeder Reactors," *HyperPhysics.com*, <http://hyperphysics.phy-astr.gsu.edu/hbase/nucene/fasbre.html#c4> (accessed 22 November 2007).

¹⁵³ "Plutonium Watch: Tracking Plutonium Inventories," *Institute for Science and International Security*. http://www.isis-online.org/global_stocks/plutonium_watch2004.html#table2 (accessed 22 July 2007). In 2004, Japan had a total of 145 tons of plutonium holdings in country. Of the 145 tons, 106 were in the form of irradiated plutonium while 38.6 tons were in the form of MOX fuel.

¹⁵⁴ "Japan to Launch Nuclear Processing Plant," *Lateline: Australian Broadcasting Corporation*, 03 March 2006 <http://www.abc.net.au/lateline/content/2006/s1583771.htm> (accessed 14 March 2007).

¹⁵⁵ *Ibid.*

will. When the Rokkasho reprocessing facility comes online, in 2012, Japan will possess the means to complete the nuclear fuel cycle.¹⁵⁶ It already maintains a large-scale uranium enrichment plant, which is also located at the Rokkasho site. The enrichment plant is capable of reprocessing 900 tons of uranium per year.¹⁵⁷

(3) Education. Japan's universities have many programs and courses that concentrate on the science and physics required to advance their nuclear program. More importantly, the curriculums could also provide the foundation needed for a nuclear weapons program. For example, two of Japan's major universities, Tokyo and Kyoto Universities, have departments dedicated to Chemical Engineering, Applied Physics, and Materials Engineering. Additionally, Japan's Kyoto University has a department dedicated to the research, advancement, and development of Advanced Energy. This department is dedicated to advancing nuclear power, but not specifically targeted at their civilian or weapons program. However, the department does address both topics as is evident by their divisions in Fusion Reactor, Space Energy Systems, and Advanced Electric Energy Systems ¹⁵⁸

Additionally, Japan maintains positive relationships with such countries as the United States, France, and Russia. These relationships provided Japan with exchange programs so their scientists can keep abreast of current technologies.¹⁵⁹ A way this was accomplished was through organizations like the World Nuclear University. This group consists of 30 delegates, of which Japan is a member and has 15 representatives. The group discusses nuclear science in terms of energy and nuclear weapons. However, the discussions concerning nuclear weapons are targeted at non-

¹⁵⁶ "Japan to Launch Nuclear Processing Plant," *Lateline: Australian Broadcasting Corporation*, 03 March 2006 <http://www.abc.net.au/lateline/content/2006/s1583771.htm> (accessed 14 March 2007).

¹⁵⁷ "Japan's Nuclear Fuel Cycle Facilities," *Japan's Nuclear Power Program: Power for the Future of Japan*, <http://www.japannuclear.com/nuclearpower/fuelcycle/facilities.html> (accessed 14 March 2007).

¹⁵⁸ "Graduate School of Frontier Sciences," *The University of Tokyo*, <http://www.k.u-tokyo.ac.jp/index.html.en> (accessed 14 March 2007).

¹⁵⁹ "Scientist Exchanges," *Japan Society for the Promotion of Science*, <http://www.jsps.go.jp/english/e-asia/exchange.htm> (accessed 12 October 2007).

proliferation.¹⁶⁰ The World Nuclear University is supported by International Atomic Energy Agency (IAEA), the Nuclear Energy Agency of the OECD, the World Association of Nuclear Operators, and the World Nuclear Association. Unlike in the past, Japan now has the ability to operate a full nuclear fuel cycle and therefore has the technical potential to build bomb of its own.

D. SOCIAL FACTORS

The influence of the Japanese public was illustrated in earlier case studies when political leaders were quickly removed from office for talking about re-militarizing or developing a nuclear weapons program. Similar to the previous two case studies, the Japanese public has remained steadfast in its efforts to remain a non-nuclear state. However, in contrast to the previous two case studies, the Japanese public has shown glimpses of change with regard to application and utilization of its Self-Defense Forces (SDF). This change was significant because it showed a possible shift in conceptual paradigms. This section will analyze how these opposing issues contributed to Japan's decision not to develop a nuclear weapons program.

1. Influential Element

In 1995, Japan agreed to the indefinite extension of the NPT. This was significant because it proved that neither the international community nor the Japanese public wanted to debate Japan's nuclear status. However, Japanese public sentiment soon began to change in 1998 when India and Pakistan tested nuclear weapons. This was significant because Japan had just agreed to an indefinite extension of an international document aimed at preventing the proliferation of nuclear weapons. When India and Pakistan tested their weapons, the international community's reaction was not what Japan had anticipated. Although the two countries were heavily criticized, Japan was disappointed that significant actions were not taken to dismantle the two programs. Suddenly the

¹⁶⁰ "World Nuclear University Participants," *World Nuclear University*, <http://world-nuclear-university.org/html/participants/index.htm> (accessed 12 October 2007).

number of nuclear Asian countries went from two to four.¹⁶¹ This infuriated Japanese officials and public and the debates over whether or not Japan should reconsider its policy on nuclear weapons had resurfaced.

Despite the nuclear tests by India and Pakistan and other issues like North Korea's missile tests, the Japanese public was still against a change to its nuclear weapons posture. In 1999 the *Asahi Shimbun* conducted a poll that focused on whether or not the Japanese public agreed to changes in the guidelines that dictated the U.S.-Japan security alliance. The poll specifically targeted guidelines that changed Japan's Three Non-Nuclear Principles. The poll showed that 43% of the respondents (a majority) disagreed with the guidelines that would change the posture of Japan's Three Non-Nuclear Principles.¹⁶² Additionally, former Vice Minister of the Defense Agency, Nishimura Shingo, was forced to resign because of statements he made in an interview stating that "the Diet should consider whether Japan would be better off if it armed itself with nuclear weapons."¹⁶³ His statements questioned the foundation of Japan's defense policy—the Three Non-Nuclear Principles. More important was the reaction of the Japanese public. It demonstrated that the anti-nuclear sentiment was still alive and well.

In September 2006, Shinzo Abe was appointed Prime Minister and the international community anxiously waited to see how Prime Minister Abe's hawkish views would address the external security threats stemming from China and North Korea. Their concerns stemmed from the fact Prime Minister Abe has historically taken a hard line against issues dealing with North Korea; specifically, the North Korean abduction of Japanese citizens.¹⁶⁴ Even more alarming was the fact Prime Minister Abe had stated that Japan, based on its Constitution, possessed the right to develop nuclear weapons. However, Prime Minister Abe quickly quelled international and domestic concerns of a possible offensive nuclear response to either situation when he stated that Japan had no

¹⁶¹ Joseph Cirincione, "The Asian Nuclear Reaction Chain," *Foreign Policy* 18 (Spring, 2000): 125.

¹⁶² DiFilippo, "Can Japan Craft an International Nuclear Disarmament Policy," 574.

¹⁶³ *Ibid.*, 574.

¹⁶⁴ Steve Herman, "Japan's Cabinet to Tackle North Korean Abduction Issue," *Global Security.org*, 29 September 2006, <http://www.globalsecurity.org/wmd/library/news/japan/2006/japan-060929-voa01.htm> (accessed 18 October 2007).

intentions of straying from the Three Non-Nuclear Principles and “we [Japan] absolutely do not have the option of owning nuclear weapons.”¹⁶⁵ However, this did not prevent debates over whether or not Japan should develop its own nuclear weapons from occurring.

Another poll was conducted by Nippon Television (NTV) and asked respondents whether or not Japan should debate the development of a nuclear weapons program. The poll came as a response to Liberal Democratic Party (LDP) Policy Research Council Chairman Shoichi Nakagawa when he stated that Japan should consider developing nuclear weapons following North Korea’s missile tests. The results were as follows: 47 percent of the respondents said that the debates should occur while 22 percent “did not see a strong reason for such discussions.”¹⁶⁶ However, it was the open support for Nakagawa by Foreign Minister Taro Aso that created the greatest amount of public protest. Although Foreign Minister Aso attempted to pass the situation off as “simply floating the idea that there might be some benefit to discussing the possession of nuclear arms for security reasons,” he was promptly removed from office.¹⁶⁷

2. Possible Changing Sentiment

The Japanese government has tried to refute the argument that a country must possess a superpower military to be considered a superpower state. Evidence of this claim was seen in how Japan uses its economic position within the international community to address international affairs. Specifically, Japan is the world’s biggest contributor of ODA. In the past, Japan had been reluctant to engage itself outside of its natural borders and that could be due to the public’s perception that continued international engagement

¹⁶⁵ Bennett Richardson, “Japan’s Quick Response to North Korea Reflects Abe’s Harder Line,” *Christian Science Monitor*, 13 October 2006, <http://www.csmonitor.com/2006/1013/p06s02-woap.html> (accessed 18 October 2006).

¹⁶⁶ Tadayuki Tamai, “Debate Needed on Nuclear Issue,” *The Daily Yomiuri* (Toyko), 15 November 2006, 4.

¹⁶⁷ *Ibid.*

would likely push Japan to achieve a military status commensurate with its economic status.¹⁶⁸ This was far from the case as Japan would rather provide financial support compared to military support.

An example of this was in Gulf War I when Japan only provided financial support to the U.S. led multinational forces. Japan had initially offered \$2 billion and eventually approved an additional \$5 billion. However, U.S. Treasury Secretary Nicholas F. Brady insisted that Japan provide an additional \$10 billion. The justification for this sum was based on the amount of money Japan provided to the Middle East for ODA and MITI.¹⁶⁹ However, some argued that the United States requested the increased amount of money because Japan refused to provide diplomatic or military assistance to the Gulf War effort. Japan ended up providing \$13 billion, or 20% of the entire cost of Desert Shield and Desert Storm combined.¹⁷⁰

Gulf War I was significant because it was the catalyst that made Japan reconsider how it traditionally dealt with foreign policy. Japan realized that it could no longer substitute money for diplomatic or military resources when asked to engage in international affairs. If Japan wanted to be considered a major player within the international community, a change in its foreign policy was required. But before Japan could change its foreign policy, it first had to convince its domestic community that change was required. To do this, Japan's government turned to the U.N.

The U.N. was an organization that promoted international stability through peace keeping operations. Japan's government convinced its domestic constituency that a more active role in U.N. sponsored PKO would lead to regional stability and therefore increased national security.¹⁷¹ The Japanese public accepted this line of reasoning as the Japanese government "massaged" its Constitution to allow the SDF to carry out U.N.

¹⁶⁸ Kishore Mahbubani, "Japan Adrift," *Foreign Policy* 88 (Autumn, 1992): 139

¹⁶⁹ Courtney Purrington, "Tokyo's Policy Responses During the Gulf War and the Impact of the "Iraqi Shock" on Japan," *Pacific Affairs* 65, no. 2 (Summer, 1992): 163.

¹⁷⁰ Kent E. Calder, "Japan in 1991: Uncertain Quest for a Global Role," *Asian Survey* 32, no. 1 (January, 1992): 33.

¹⁷¹ Aurelia George, "Japan's Participation in U.N. Peacekeeping Operations: Radical Departure or Predictable Response," *Asian Survey* 33, no. 6 (June, 1993): 561.

operations. Since 2005 Japan's SDF has participated in eight U.N. PKO in such countries as Angola, Cambodia, Mozambique, El Salvador, the Golan Heights, and Timor-Leste.¹⁷²

In the eyes of the domestic public, the purpose of allowing the SDF to participate in U.N. PKO was that it raised Japan's political profile in international affairs, won greater international respect for Japan in that it was finally willing to engage in international affairs, and presented Japan an opportunity to gain a seat on the U.N. Security Council.¹⁷³ In the eyes of the international community, the fact Japan had released its SDF for PKO meant that Japan, specifically its public, was slowly shedding its fears of re-militarizing to become an international leader.

E. CONCLUSION

Japan agreed to the indefinite extension of the NPT because the political, social, and economic incentives to remain a non-nuclear state outweighed the incentives to become a nuclear power. The decision to remain a non-nuclear state had come in the face of increasing instability from North Korea as it continued to conduct missile tests and openly defy the international institutions and laws aimed at promoting stability and peace. Specifically, North Korea withdrew from the NPT in 2003 to continue to develop its own nuclear weapons program. In 2006, North Korea conducted its first nuclear test. Additionally, Japan had to contend (politically, economically, and militarily) with rising powers within the region. China and India have evolved as two powers that are not only competitors in the region, but have established themselves as competitors in the world. This chapter determined that the following political, economic, and social factors heavily influenced Japanese leader's opinions to forego the development of a nuclear weapons program.

Politically, Japan was prohibited from developing a nuclear weapons program because of pre-existing treaties, alliances, documents, and policies. However, an increased call for nationalism, instability in the region, and rising external military

¹⁷² "Japan's Contribution to U.N. Peacekeeping Operations," *The Ministry of Foreign Affairs of Japan*, <http://www.mofa.go.jp/policy/un/pko/pamph2005.html> (accessed 22 November 2007).

¹⁷³ Aurelia George, "Japan's Participation in U.N. Peacekeeping Operations: Radical Departure or Predictable Response," *Asian Survey* 33, no. 6 (June, 1993): 561.

powers caused Japan to question whether or not its existing security measures would indeed work. Similar to the Internal Report conducted in 1968/1970, Japan conducted another secret report in 1995 to determine whether or not it should develop its own nuclear weapons program. The results of the report stated that the advantages of remaining a non-nuclear state outweighed the advantages associated with becoming a nuclear power.

Therefore, Japan made the decision to remain a non-nuclear state based on the following factors: (1) a nuclear Japan would disrupt the military balance in the region, perhaps provoking a nuclear arms race; (2) a nuclear Japan would undermine the basic principles of the NPT; (3) a nuclear Japan would ruin its relationship with the United States and subsequently ruin relationships with its allies; (4) a nuclear Japan would not exist as a practical nuclear deterrent against other nuclear members; and (5) the international community would contain North Korea's unstable actions and China's rising military; and (6) the appointment of a more moderate Prime Minister.

Economically, Japan not only wanted to retain its unlimited access to international markets, but it wanted to use its economic standing within the international community as a diplomatic tool to ensure its continued economic security. Additionally, Japan wanted to strengthen its existing national security alliance with the United States. Japan's decision not to develop a nuclear weapons program was affected by two economic issues. First, for Japan to continue to depend on the United States for its national security, it needed to overcome the friction that had arisen between the two countries because of trade imbalances. The trade imbalances that favored Japan led to accusations and trade restrictions. However, the real fear amongst Japanese politicians was that the economic troubles between the two countries would bleed over into their political and security relationships. To alleviate these fears, the two countries have engaged in vital talks aimed to rectify their current economic challenges. The success of these talks have met minimal success, but they are still working in the right direction

The second economic issue was Japan's use of its economic standing within the international community to engage developing countries. Japan's purpose for doing this was twofold. First, Japan was heavily criticized by the international community for only

committing financial resources to world problems. However, Japan did not possess military power like its superpower counterparts and, more importantly, its internal documents and treaties did not allow for the creation of a military force to tend to international issues. Therefore, Japan opted for a foreign policy that centered on economic diplomacy versus military diplomacy. This meant that Japan sent money instead of troops to deal with international affairs.

The second reason why Japan focused on developing countries was to strengthen its economy while ensuring its national security. Japan is a country of scarce natural resources and fortunately, the developing countries to which Japan provided grants and aid possess the resources Japan needs to operate and survive. Therefore, establishing trade between Japan and the LDC's provides economic relationships and leads the way to possible future diplomatic alliances. The international community recognized the importance of these economic relationships and soon organizations like APEC, ASEAN, and the WTO engaged the LDC's because of the economic stability brought to the Asian region.

Socially, Japan has shown a slow metabolism when trying to digest change. During this period, one could see how Japan's society remained consistent when dealing with internal affairs. However, when dealing with international affairs, one can start to see a gradual change. Internationally, Japan's perception of its military and the employment of its small forces have changed. Japan's domestic community understands that in order for it grow within the international community; it has to take a greater role in its affairs. Japan does not maintain a huge military force and its checkbook diplomacy was no longer an acceptable way for an aspiring superpower to deal with international affairs. To address the changing environment, Japan amended its constitution to allow its SDF to deploy on U.N. PKO's. This satisfied both the international and domestic communities because Japan was now taking a more proactive role outside of its borders even though it limited the SDF's engagement to non-offensive operations.

Despite Japan's willingness to yield to international pressures to take a more proactive role within the international community, Japan's domestic community refused to yield to the internal pressures to develop a nuclear weapons program. Foreign Minister

Aso learned this lesson firsthand when he stated that Japan should think about developing nuclear weapons. Similar to his predecessors that also argued for the possible development of a nuclear weapons program, Foreign Minister Aso was promptly removed from office. It was evident that, despite Japan's ascendancy to world leader status, it still failed to possess the domestic motivation to develop nuclear weapons.

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V. U.S. POLICY OPTIONS AND CONCLUSION

A. U.S. POLICY OPTIONS

This thesis will present four policy options based on Japan's current political, economic, and technological capabilities. The advantages and disadvantages of each policy option will be addressed in order to produce a coherent strategy that U.S. policy makers could implement in seeking to address future security pressures in Japan. The policy options are as follows: (1) the United States keeps Japan under the nuclear umbrella with no Japanese military buildup except missile defense; (2) the United States supports the strengthening of Japan's SDF into a strong conventional military force; (3) the United States supports the development of a Japanese nuclear weapons program; and (4) Japan is allowed to go its own way, without input from the United States or the international community.¹⁷⁴

1. Analysis of Proposed Policy Options

The first policy option maintains Japan's security concerns under the U.S. nuclear umbrella without major shifts in Japan's conventional capabilities. This means that the United States maintains responsibility for Japan's security and defense. This is the current state of affairs between the two countries and enables them to continue working towards developing a common defense and military strategy—specifically the Theater Missile Defense (TMD) system. The advantages of this option include: (1) the two countries maintain favorable relations and continue to advance economically, militarily, and politically; (2) Japan retains its position as a prime role model of the NPT; (3) Japan

¹⁷⁴ The advantages and disadvantages will be listed for each policy option and are not all inclusive. However, the ones listed are the most important because of how they fuel current debates or how they influence foreign policies. Many of the advantages and disadvantages overlap between policy options; therefore, this paper will explain the specifics of each advantage and disadvantage for the single policy option chosen.

maintains access to current materials and technologies to advance their civilian nuclear power plants; (4) the United States keeps its bases in Japan; and (5) Japan will not be committed to any additional treaties.

The disadvantages of policy option one include: (1) United States must continue to spend money to protect Japan; (2) the two countries would likely maintain the current father-son relationship; and (3) there will continue to be debates concerning the U.S.-Japan security alliance.

With the second policy option, the United States supports the strengthening of Japan's SDF into a strong conventional military force. The advantages of policy option two include: (1) the SDF assumes a greater responsibility in the Far East region; (2) the United States could decrease its presence in the Far East region; (3) Japan improves its perception outside of Asia by accepting greater responsibilities for collective security; and (4) Japan receives the respect commensurate with its political and economic status.

The disadvantages of policy option two include: (1) the possible perception that Japan is attempting to re-militarize and return to its formerly aggressive policies; (2) the difficulty that is involved with changing the Constitution in order to justify strengthening a military for self-defense purposes and possible external combat missions—although, this would likely only occur under a U.N. flag; (3) the possible provocation of regional states, prompting them to increase their military forces; and (4) the prompting of regional states to counter a rising Japanese conventional military force—specifically referring to states developing nuclear weapons programs.

With the third policy option, the United States supports the development of a Japanese nuclear weapons program. This would be a joint U.S.-Japan venture and the other relationships shared between the two countries would continue to grow. This option would also require the United States to allow for the remilitarization of Japan. The advantages of policy option three would include Japan achieving a position within the international community commensurate with its economic and political status and possible help to the United States in deterring China's nuclear forces.

The disadvantages of policy option three include: (1) Japan's loss of its prestige linked to its non-nuclear-weapons policies; (2) the development of a Japanese nuclear weapons program is likely to promote the spread of nuclear weapons in the region by creating an Asian arms race; (3) a Japanese nuclear weapons program would likely fail to balance China's physical mass, potential nuclear arsenal, and much larger and more dispersed population; (4) the continued U.S.-Japan partnership will provoke heightened Chinese and Korean rearmament; and (5) a nuclear Japan could lead to Russian redeployments in the Far East.

With the final policy option, The United States breaks with Japan and it decides to develop an independent nuclear weapons program without the support or permission from the international community. The only advantage of this option is that Japan would no longer be suppressed by the father-son relationship and Japan would finally be recognized as a major player within the international community, albeit as a possible pariah state. However, this would be detrimental to the United States and its vital presence in the region. Additionally, a Japan with nuclear weapons—especially outside the restraining effects of the U.S.-Japan alliance—would drive a bigger wedge between itself and other regional powers like China, the Korean Peninsula, and Russia.

Fortunately, the Japanese have recognized the disadvantages of pursuing their own nuclear weapons program in the past and therefore are unlikely to do so in the future. These reasons include: (1) the international community would discontinue support for the Japanese civilian nuclear program; and (2) a nuclear Japan would ruin established ties with its existing allies and threaten trade relations. Not only does the United States provide for Japan's security, but the two countries depend heavily on each other economically. Japan is the United States' top export partner and its number two import partner.¹⁷⁵ Also, Japan is a group of islands with few natural resources and depends heavily on imports from the international community. By developing nuclear weapons, Japan understands it would sever ties with many members within the international community that provide it with needed resources.

¹⁷⁵ "Japan Economy – 2007," *Federation of American Scientists*, 02 February 2007, http://www.theodora.com/wfbcurrent/japan/japan_economy.html (accessed 12 March 2007).

2. The Selected Policy Option

Based on the policy options covered, this thesis supports a combination of policy options one and two. Under policy option one, Japan remains under the nuclear umbrella provided by the United States. Policy option two supports the strengthening of Japan's SDF into a stronger but still largely defensively oriented conventional military force. Supporting both of these options ensures that both the United States and Japan continue to benefit from pre-existing political, economic, and social alliances. Additionally, these two options provide the best means for Japan to address regional and international pressures.

If the United States supports policy option one, both countries can continue to advance the strategic partnership and Japan's TMD system. This option is favored over the others because it addresses the instability in the Far East region and rising military from China but not in provokable manner. Moreover, this option has gained popularity amongst U.S. policy makers.¹⁷⁶ The United States and Japan maintain their established relationships and can continue to advance economically, militarily, and politically.¹⁷⁷ These relationships have evolved since their inception at the end of World War II. Then, the United States could heavily influence the direction that Japan would likely take. The initial father-son relationship was important after World War II because it was a major reason for Japan's current successes that it benefits from today. It was able to concentrate on rebuilding its political, social, and economic sectors and let the United States take responsibility for its defense.

For example, economically, the key partnership shared between the United States and Japan was recently reaffirmed in the so-called Economic Partnership for Growth with an objective to "promote sustainable growth in both countries as well as the world by addressing such issues as sound macroeconomic policies, structural and regulatory

¹⁷⁶ "Theatre Missile Defense and Northeast Asian Security," *Nuclear Threat Initiative*, August 2001, http://www.nti.org/e_research/e3_3a.html (accessed 11 March 2007).

¹⁷⁷ Kazuo Ogoura, "Improving Japan-Russia Ties," *The Japan Times*, 04 June 2007. Just as important as maintaining a relationship with the United States is the fact it must also maintain treaties and partnerships with its allies. Japan has many treaties with such world powers as the European Union, China, and Great Britain and recently has recently resumed the Japan-Russia Forum.

reform, financial and corporate restructuring, foreign direct investment, and open markets and by providing a structure for cooperation and engagement on bilateral, regional, and global economic trade issues.”¹⁷⁸ Politically, the two countries combat such issues as terrorism, human rights, social injustice, and piracy. But today Japan can take on more responsibility without threatening its economy and it should be encouraged to do so in a gradual manner.

Japan would also maintain its status and position within the NPT. Being the only country that has lived through the horror of a nuclear attack, Japan carries considerable influence when it comes to convincing potential proliferators to refrain from developing nuclear weapons. Japan has demonstrated that a country can succeed politically and economically without the assistance of nuclear weapons. The United States and the rest of the international community depend on Japan to set this example.

Under this scenario, Japan also maintains access to the materials, technology, and equipment to help supply its civilian nuclear power plants. To Japan, this is important for reasons stated earlier, but from a U.S. perspective, this ensures that Japan stays under the watchful eye of organizations like the IAEA. With the huge amounts of plutonium Japan has stockpiled, a lapse in controls could be dangerous.¹⁷⁹ Additionally, Japan will continue to work with the United States and develop a strategic alternative to a Japanese nuclear weapons program—for example, the TMD system.

The combined policy option acknowledges Japan’s newly established and responsible role within the international community and the fact it will continue to evolve and prosper. With the United States taking this pragmatic stance, its footprint in the region and Japanese national affairs are not increased. Policy option one, on its own, fails to address some internal and external elements that insist Japan provide a greater role, specifically militarily, in international affairs. With policy option two, the Japanese SDF

¹⁷⁸ “U.S.-Japan Economic Partnership for Growth,” *The Ministry of Foreign Affairs of Japan*, 30 June 2001, http://www.mofa.go.jp/region/n-american/us/pmv0106/joint_e.html (accessed 09 March 2007).

¹⁷⁹ At the end of 2004, Japan had 43.1 tons of plutonium, 29.3 tons was fissionable. The international community takes this seriously as it only takes a couple of kilograms to make a nuclear bomb. “Japan’s Plutonium Stockpile Tops 43 Tons,” *PhysOrg.com*, 08 September 2005, <http://www.physorg.com/news6316.html> (accessed 15 October 2007).

can assume a greater role in collective security and self-defense. It would provide a means for Japan to attain international respect because it would no longer shun international affairs. Although the deployment of SDF for U.N. PKO was a major turning point in how Japan dealt with international affairs, it was still heavily criticized for not doing more. If Japan wants to be considered a great power within the international community, it must engage the international community in a way that is commensurate with its political, economic, and technological capabilities while also setting a good example of responsible behavior reflective of its special role and identity as a non-nuclear weapons state. By strengthening Japan's SDF into a strong conventional military force, Japan would have the ability to assume a larger role in not only the Far East region, but also the international community.

Currently, the Japanese SDF provide for Japan's security by performing naval perimeter patrols with ships and submarines. Additionally, the Japanese Navy also conducts P-3 flights over and around the Japanese islands. The military maintains its proficiency by engaging in allied naval exercises and studies abroad at military universities. These facts are significant because they show that Japan has the leadership and force structure to expand its military efforts throughout the Far East region. If Japan is able to assume a larger military role, then the United States could eventually decrease its presence in the Far East region. This is significant because many have argued that the large U.S. footprint in Far East Asia is a major reason why states like China feel the need to develop a significant military force of their own.¹⁸⁰

A decreased U.S. military presence in the Far East region would free up military resources that could be allocated to current trouble spots in the world—specifically, the Middle East. This option now seems more feasible, as North Korea has recently signed an agreement stating that it will terminate its current nuclear weapons aspirations. Therefore, Japan's remaining regional security threat would be China. Even though China's military forces and capabilities continue to grow, a decreased U.S. military presence does not

¹⁸⁰ "Why Does U.S. Preach China Military Threat?" *People's Daily Online*, 15 June 2005, http://english.peopledaily.com.cn/200506/15/eng20050615_190420.html (accessed 22 November 2007).

mean that the United States would forfeit its basing and port privileges. The United States would still maintain a strong influence in the region.

The advantages of merging the two policy options to create a single option provides U.S. policy makers with an overall plan to maintain current relationships while planning for future change and expansion. However, there are disadvantages for the proposed policy option that must also be addressed. The first disadvantage is that the United States must continue to spend large amounts of money to support its current military and strategic interests in Japan.¹⁸¹

The second disadvantage with the proposed policy option is that it does little to refute the debate that asserts the United States wants to maintain its already large footprint in the region and Japanese affairs. But as stated earlier, the United States wants to formulate a policy that enables the Japanese SDF into assume a greater role in the region. This is an actually an example where less of a U.S. presence would be required to provide security in Japan.

The third disadvantage of the proposed policy option is the perceived re-militarization of Japan. If Japan is perceived to re-militarize, it could cause regional countries like Taiwan and South Korea to follow their lead because of not wanting to be the only countries to exist in a region dominated by larger militaries that would now include Japan. Additionally, the re-militarization of Japan could legitimize North Korea's nuclear weapons program. This is because nuclear weapons could prove to be an attractive equalizer against a superior Japanese conventional military force. Finally, the re-militarization of Japan could prompt Russia to re-assume military positions throughout the Far East region to protect its buffer zones.

For this reason, this combined policy option must be pursued carefully and in concert with regional confidence-building measures. On Japan's part, transparency in its doctrine, dialogue, and military expansion effort is key to ensure its full intentions are understood. For this to occur, open dialogue must occur at all levels (Track One and

¹⁸¹ Chris Prebble, "Two Normal Countries: Rethinking the U.S.-Japan Strategic Relationship," *Cato Institute: Policy Analysis* 566 (18 April 2006): 1.

Two) amongst involved states. This could include talks between foreign delegates, consulates, and foreign advisors to discuss issues relevant to all of the countries involved. Additionally these talks would emphasize Japan's defensive (not offensive) orientation and its focus on strengthening *collective* security in Northeast Asia. Additionally, unofficial talks, out of the scrutiny of the public eye, could produce discussion on specific problems. The results of these talks could be forwarded to the leaders that negotiate at the Track One level and could also be used to encourage more regional talks like the Asian-Pacific Economic Cooperation Council (APEC) and Six-Party Talks. Finally, the role of the United States in helping to manage this transition would be important.

B. CONCLUSION

Given the state of Japan following the atomic bomb droppings on Hiroshima and Nagasaki, few would have envisioned Japan as it stands today. Through a series of documents, treaties, and alliances created in the post-World War II period, Japan has fully integrated itself into the bipolar system. Since the end of the Cold War, there are emerging multipolar pressures for Japan to acquire nuclear weapons. However, Japan's current nuclear policy has proven the predictions of two neo-realists—Kenneth Waltz and John Mearsheimer—wrong. This thesis discovered that two overarching themes have emerged to explain why Japan abstained from developing nuclear weapons in the past and, as importantly, why Japan is likely to continue to abstain from developing nuclear weapons in the future. The two themes are: (1) the U.S.-Japan security alliance; and (2) the unique will of the Japanese people to remain a non-nuclear state.

In the first case study, the alliance with the United States can be explained by Waltz's neo-realist paradigm because Japan was forced to bandwagon with an existing power, the United States. This not only ensured Japan's national security, but also made it possible for Japan to concentrate on rebuilding its war torn political, economic, and social structures. This was significant because the U.S.-Japan security alliance produced subsequent alliances that led to the rapid political and economic industrialization Japan experienced towards the end of the first case study. It was for these reasons that Japan decided not to develop nuclear weapons during this period.

In the second case study, Waltz's neo-realist paradigm began to lose its relevance as Japan had evolved into a significant political and economic player within the international community—it was no longer just a strategic regional foothold of the United States. Although Japan still relied on the United States for its national security, it was beginning to associate itself more with the institutional norms established by the NPT and the U.N. Additionally, the unique will of the Japanese people was becoming more prominent during this period and beginning to assert itself as a major influence upon Japanese politicians. The anti-nuclear sentiment that originated during the first case study was now a force focused on preventing the international proliferation of nuclear weapons. Also, the will of the public was now a significant political factor in persuading Japanese policy makers to not develop a nuclear weapons program.

In the third case study, a desire for great power status and emerging regional threats convinced some proponents to argue for the development of a nuclear weapons program. This argument represented even more of a shift in conceptual paradigms, as achieving this status would mean that Japan would have moved out from under the wing of the United States and would have attempted to sit as an equal with it and other nuclear-armed states on the international stage.

The threat of a nuclear North Korea, a possibly weakening U.S.-Japan security alliance, and a rising China made it difficult to argue against Japan developing its own nuclear weapons program. However, the other side of the debate argued that a system now existed where the U.S.-Japan security alliance had become institutionalized into a “collective security” mindset in Japan. Similar to how the NPT and the U.N. have established themselves as institutional norms that strive to achieve a non-nuclear world, the U.S.-Japan security alliance has evolved into an institutional norm that provides the framework for ensuring regional stability. Therefore, the unique identity and non-nuclear will of the Japanese people is critical in supporting this trend.

1. Will of the Japanese People

Constructivist theory helps explain how the will of the Japanese people produced a non-nuclear state. Constructivists argued that a state's interests and behavior are

influenced by its identity. Additionally its perceived place in the international community is developed and affected by its interactions with other states. Based on this conceptual approach, Japan rejected nuclear weapons because the will of the Japanese people has not allowed it to do so. Japan was the only country to experience and live through the effects of a nuclear weapons attack. Because of this fact, Japanese society has developed an anti-nuclear sentiment in hopes of preventing the same tragedy from occurring again. The strength of this sentiment stems from a Japanese political apparatus that continues to assimilate the emotional factors of its society into policy by choice. The strength of the Japanese identity has actually grown across the three case studies and, despite the external and internal influences that are pushing for change, it is unlikely to capitulate in the near future.

The atomic bombs dropped on Nagasaki and Hiroshima not only devastated and destroyed the physical infrastructure of Japan; but more importantly, it devastated and destroyed the mental psyche of the Japanese society. Even though Japan was able to rapidly reconstruct the physical damage inflicted on Japan, the negative Japanese sentiment against nuclear weapons still remains today. This was evident as endless polls were conducted by Japan's leading newspapers. The *Asahi Shimbun* newspaper conducted polls in 1968, 1978, 1981, and in 1998 asking the Japanese public if they supported Japan acquiring nuclear weapons. The results and significant threats during that particular period are listed in Table 2.

Year	For Nuclear Weapons	Against Nuclear Weapons	Significant Threats/Considerations
1968	21	68	Chinese Nuclear Test
1978	15	73	NPT Signature
1981	16	71	Oil Crisis
1998	10	86	1998 DPRK Missile Tests and Nuclear Ambitions
2006	18	80	DPRK Nuclear Test

Table 2. Japanese Opinion Concerning a Nuclear Japan¹⁸²

One would think that the external threats and pressures directed towards Japan's security would translate into increased support for nuclear weapons; however, just the opposite is true. Table 2 shows an overall decline in support for a nuclear Japan in the face of significant security threats. Table 2 indicates that in 2006, there was a slight increase in public for support for the development of nuclear weapons. But this was due to the time the poll was conducted. Following North Korea's nuclear test in October 2006, the Angus Reid Global Monitor asked 1,757 Japanese whether or not Japan should uphold its Three Non-Nuclear Principles or consider reviewing the principles for possible change.¹⁸³ It is likely that this figure has now declined.

The Japanese public's willingness to speak out against the development of nuclear weapons influenced the Japanese political apparatus. During each case study at least one high-ranking Japanese official stated that either Japan *should* consider the development of nuclear weapons, or *possessed* the ability to do so. Both types of statements raised concern domestically and elicited strong public calls for their repudiation. Accordingly, such Japanese political leaders as Foreign Minister Taro Aso and Shoichi Nakagawa eventually had to resign or be removed.

¹⁸² Llewelyn Hughes, "Why Japan Won't Go Nuclear (Yet)," PhD. dissertation. (Department of Political Science, Massachusetts Institute of Technology, 2004), 19.

¹⁸³ "Japan Rejects Possession of Nuclear Weapons," *Angus Reid Global Monitor: Polls & Research*, 21 November 2006, <http://www.angus-reid.com/polls/view/13872> (accessed 17 October 2007).

2. Today's Debates Will Not Produce a Nuclear Japan

This thesis proposed that the incentives associated with becoming a nuclear state might now outweigh the incentives associated with remaining a non-nuclear power. However, the recent debates have once again produced a nuclear-free Japan. This conclusion was based on analyzing three case studies and identifying the enduring political, economic/technological, and social factors that have led Japan to reject nuclear weapons even in the face of its vastly more advanced economy, greater technological capabilities, and the emergence of new security threats.

Each time the nuclear debates have occurred, the will of the Japanese people to remain a non-nuclear state has only gotten stronger. This is especially true despite a rising Chinese state (politically, economically, and militarily) and an unstable North Korea. The strength of the Japanese public's resolve stems from: (1) a belief in its identity as a non-nuclear state; and (2) established norms and institutions that over time have evolved into a framework for regional stability and a basis for the non-proliferation of nuclear weapons. As long as such elements as the U.S.-Japan security alliance, the Non-Proliferation Treaty, and Japan's unique anti-nuclear-weapons identity remain intact, there is no reason to believe a nuclear-armed Japan will emerge.

LIST OF REFERENCES

- Baker, Richard W. and Charles E. Morrison, eds. *Asia Pacific Security Outlook 2005*. Tokyo, Japan: Japan Center for International Exchange, 2005.
- Beer, Lawrence W. "Japan Turning the Corner." *Asian Survey* 11, no. 1 (January 1971): 74 – 85.
- Bueno de Mesquita, Bruce and William H. Riker. "An Assessment of the Merits of Selective Nuclear Proliferation." *The Journal of Conflict Resolution* 26, no. 2 (June 1982): 283 – 306.
- Bullard, Monte R. "Japan's Nuclear Choice." *Asian Survey* 14, no. 9 (September 1974): 845 – 853.
- Buss, Claude A. "U.S. Policy on the Japan Treaty." *Far Eastern Survey* 20, no. 12 (June 1951): 113 – 119.
- Calder, Kent E. "Japan in 1991: Uncertain Quest for a Global Role." *Asian Survey* 32, no. 1 (January 1992): 32 – 41.
- Campbell, Kurt M. and Tsuyoshi Sunohara, ed., *The Nuclear Tipping Point*. Washington, DC: Brookings Institute Press, 2004.
- Carter, Ashton B. "America's New Strategic Partner?" *Foreign Affairs* 85, no. 4 (2006): 33 – 44.
- Cha, Victor D. and David C. Kang. *Nuclear North Korea: A Debate on Engagement Strategies*. New York: Columbia University Press, 2003.
- Cirincione, Joseph. "The Asian Nuclear Reaction Chain." *Foreign Policy* 18 (Spring, 2000): 120 – 136.
- _____. *Bomb Scare: The History & Future of Nuclear Weapons*. New York: Columbia University Press, 2007.
- _____, Jon B. Wolfsthal, and Miriam Rajkumar. *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*. 2nd ed. Washington, D.C.: Carnegie Endowment for International Peace, 2005.
- Clemens, Walter C. Jr. "Chinese Nuclear Tests: Trends and Portents." *The China Quarterly* 32 (Oct – Dec 1967): 111 – 131.

- Cooper, William H. "U.S.-Japan Economic Relations: Significance, Prospects, and Policy Options." Congressional Research Service, RL32649 (9 July 2007).
- Cronin, Patrick M. and Michael J. Green. *Redefining the U.S.-Japan Alliance: Tokyo's National Defense Program*. Honolulu, HI: University Press of the Pacific, 2005.
- Dauvergne, Peter. "Nuclear Power Development in Japan: "Outside Forces: and the Politics of Reciprocal Consent." *Asian Survey* 33, no. 6 (June 1993): 576 – 591.
- De Castro, Julio O. and Klaus Uhlenbruck. "Characteristics of Privatization: Evidence from Developed, Less-Developed, and Former Communist Countries." *Journal of International Business Studies* 28, no.1 (1st Quarter 1997): 123 – 143.
- Diehl, Sarah J. and James Clay Moltz. *Nuclear Weapons and Nonproliferation*. 2nd ed. Santa Barbara, CA: ABC-Clio, Inc., 2008.
- DiFilippo, Anthony. "Can Japan Craft an International Nuclear Disarmament Policy?" *Asian Survey* 40, no. 4 (July – August 2000): 571 – 598.
- East Asian Strategic Review*. Tokyo, Japan: The National Institute for Defense Studies Japan, 2005.
- Economic Cooperation Bureau, *Japan's Official Development Assistance Charter*. The Government of Japan: Ministry of Foreign Affairs, 2003.
- Eland, Ivan. *The Empire Has No Clothes: U.S. Foreign Policy Exposed*. Oakland, CA: The Independent Institute, 2004.
- Finnemore, Martha. *National Interest in International Society*. New York: Cornell University Press, 1996.
- Funabashi, Yoichi. *Alliance Adrift*. New York: Council on Foreign Relations Press, 1999.
- Garver, John W. *Protracted Contest: Sino-Indian Rivalry in the Twentieth Century*. Seattle, WA: University of Washington Press, 2001.
- George, Aurelia. "Japan's Participation in U.N. Peacekeeping Operations: Radical Departure or Predictable Response." *Asian Survey* 33, no. 6 (June 1993): 560 – 575.
- Gloster, Hugh M. "Hiroshima in Retrospect." *Phylon* 17, no. 3 (3rd Qtr., 1956): 271 – 278.
- Green, Michael. *Japan's Reluctant Realism: Foreign Policy Challenges in an Era of Uncertain Power*. New York: Palgrave MacMillian, 2003.

Henshall, Philip. *The Nuclear Axis: Germany, Japan and the Atom Bomb Race, 1939-1945*. Gloucestershire, United Kingdom: Sutton Publishing Limited, 2000.

Hoffman, Stanley, Robert O. Keohane, and John J. Mearsheimer. "Back to the Future, Part II International Relations Theory and Post-Cold War Europe." *International Security* 15, no. 2 (Autumn 1990): 191 – 199.

Hughes, Llewelyn. "Why Japan Won't Go Nuclear (Yet)." PhD. dissertation, Massachusetts Institute of Technology, 2004.

Ikenberry, G. J. and Michael Mastanduno, eds. *International Relations Theory and the Asia-Pacific*. New York: Columbia University Press, 2003.

Internet sources:

"APEC Economies to Reduce Aviation Greenhouse Emissions," *Asia-Pacific Economic Cooperation*, March 30, 2007,
http://www.apec.org/apec/news_media/media_releases/300307_au_aviationgreenhouseemissions.html.

"Arms Control Today," *Arms Control Association*, October 2007,
<http://www.armscontrol.org/treaties/>.

"Bureau of East Asian and Pacific Affairs," *U.S. Department of State*, Nov 2006,
<http://www.state.gov/r/pa/ei/bgn/4142.htm> accessed 11 Mar 2007.

"Bush Cites Progress in North Korea Nuclear Talks," *MSNBC.com*, 16 November 2007,
<http://www.msnbc.msn.com/id/21834298/>.

"CIA-The World Fact Book – Japan," *The World Fact Book*, 22 August 2006,
<https://www.cia.gov/cia/publications/factbook/geos/ja.html>.

"Exchange of Notes in Fiscal Year 2007 Grant Aid by Region," *The Ministry of Foreign Affairs of Japan*, <http://www.mofa.go.jp/policy/oda/note/grant-7r.html>.

"Foreign Trade Statistics: Top Trading Partners – Total Trade, Exports, and Imports," December 2006, <http://www.census.gov/foreign-trade/statistics/highlights/top/top0612.html>.

"Fukuda Fills Key Posts in Japan's Liberal Democratic Party," *International Herald Tribune.com*, 24 September 2007,
<http://www.ihf.com/articles/2007/09/24/news/japan.php>.

"Fukuda Takes Softly-Softly Approach," *Daily Yomiuri Online*, 23 November 2007,
<http://www.yomiuri.co.jp/dy/national/20071123TDY03103.htm>.

- “Graduate School of Frontier Sciences,” *The University of Tokyo*, <http://www.k.u-tokyo.ac.jp/index.html.en>.
- Herman, Steve. “Japan’s Cabinet to Tackle North Korean Abduction Issue.” *Global Security.org*, 29 September 2006, <http://www.globalsecurity.org/wmd/library/news/japan/2006/japan-060929-voa01.htm>.
- “Japan’s Cabinet to Tackle North Korean Abduction Issue,” *Global Security.org*, 29 September 2006, <http://www.globalsecurity.org/wmd/library/news/japan/2006/japan-060929-voa01.htm>.
- “Japan’s Contribution to U.N. Peacekeeping Operations,” *The Ministry of foreign Affairs of Japan*, <http://www.mofa.go.jp/policy/un/pko/pamph2005.html>.
- “Japan Economy –2007,” *Federation of American Scientists*, 2 February 2007, http://www.theodora.com/wfbcurent/japan/japan_economy.html.
- “Japan to Launch Nuclear Processing Plant,” *Lateline: Australian Broadcasting Corporation*, 03 March 2006, <http://www.abc.net.au/lateline/content/2006/s1583771.htm>.
- “Japan’s Nuclear Fuel Cycle Facilities,” *Japan’s Nuclear Power Program: Power for the Future of Japan*, <http://www.japannuclear.com/nuclearpower/fuelcycle/facilities.html>.
- “Japan’s Parliament Elects Fukuda Prime Minister,” *The China Daily Online* (Beijing), 26 September 2007.
- “Japan’s Plutonium Stockpile Tops 43 Tons,” *PhysOrg.com*, 8 September 2005, <http://www.physorg.com/news6316.html>.
- “Japan Rejects Possession of Nuclear Weapons,” *Angus Reid Global Monitor: Polls & Research*, 21 November 2006, <http://www.angus-reid.com/polls/view/13872>.
- Jocelyn Ford, “Japan / Nuclear: Background Report,” *Federation of American Scientists*, 8 October 1999, <http://www.fas.org/news/japan/991008-japan20.htm>.
- “Liquid Metal, Fast Breeder Reactors,” *HyperPhysics.com*, <http://hyperphysics.phy-astr.gsu.edu/hbase/nucene/fasbre.html#c4>.
- “Non-proliferation Policies in Japan: The Atomic Energy Basic Law” *Japan Nuclear Cycle Development Institute*, <http://www.jaea.go.jp/jnc/kaihatu/hukaku/english/atomiclaw.htm>.

- “North Korea Assails Japan Over “Threat” in Defense White Paper,” *British Broadcasting Corporation*, 16 August 2006
http://www.lexisnexis.com:80/us/Inacademic/results/docview/docview.do?risb=21_T2256777658&format=GNBFI&sort=RELEVANCE&startDocNo=1&resultsURLKey=29_T2256777661&cisb=22_T2256777660&treeMax=true&treeWidth=0&csi=10962&docNo=2.
- “North Korea Claims Nuclear Test,” *BBC News Online*, 9 October 2006,
<http://news.bbc.co.uk/2/hi/asia-pacific/6032525.stm>.
- “North Korea – Denuclearization Action Plan,” *U.S. Department of State*, 13 February 2007, <http://www.state.gov/r/pa/prs/ps/2007/february/80479.htm>.
- “Nuclear Weapons Program: Japan,” *Federation of American Scientists*, 16 April 2000,
<http://www.fas.org/nuke/guide/japan/nuke/>.
- “Plutonium Watch: Tracking Plutonium Inventories,” *Institute for Science and International Security*. http://www.isis-online.org/global_stocks/plutonium_watch2004.html#table2.
- “Press Briefing on North Korea Missile Launch,” *The Whitehouse.gov*, 04 July 2006,
<http://www.whitehouse.gov/news/releases/2006/07/20060704-1.html>.
- Richardson, Bennett. “Japan’s Quick Response to North Korea Reflects Abe’s Harder Line.” *Christian Science Monitor*, 13 October 2006,
<http://www.csmonitor.com/2006/1013/p06s02-woap.html>.
- “Sanctions Against North Korea,” *Global Policy Forum*,
<http://www.globalpolicy.org/security/sanction/indexkor.htm>.
- Saunders, Phillip C. “What to Expect from the Six-Party Talks on the Korean Nuclear Crisis.” *Center for Non-Proliferation Studies Online*, 25 August 2003,
<http://cns.miis.edu/pubs/week/030825.htm>.
- “Scientist Exchanges,” *Japan Society for the Promotion of Science*,
<http://www.jsps.go.jp/english/e-asia/exchange.htm>.
- “Signs of Progress in U.S.-Japan Trade, but Obstacles Remain,” *International Information Programs: USINFO.State.Gov*, 29 September 2005,
<http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2005&m=September&x=20050929140954ASesuarK0.449505>.
- “Surrender of Japan, 02 September 1945 – Selected and Miscellaneous Views,” *Naval Historical Center*, 7 March 1999,
<http://www.history.navy.mil/photos/events/wwii-pac/japansur/js-8.htm>.

- “Technical Aspects of Nuclear Proliferation,” *Federation of American Scientists*, <http://www.fas.org/spp/starwars/ota/934406.pdf>.
- “Theatre Missile Defense and Northeast Asian Security,” *Nuclear Threat Initiative*, August 2001, http://www.nti.org/e_research/e3_3a.html.
- “The Unthinkable: A Nuclear Japan.” *Asia Times Online*, 05 September 2001, <http://www.atimes.com/atimes/Japan/GI09Dh03.html>.
- “Treaty on the Nonproliferation of Nuclear Weapons,” *Federation of American Scientists*, 01 July 1968, <http://www.fas.org/nuke/control/npt/text/npt2.htm>.
- “Understanding the WTO,” *World Trade Organization Online*, February 2007, http://www.wto.org/english/thewto_e/whatis_e/tif_e/utw_chap1_e.pdf.
- “U.S – India Dual-Use Export Control Policies and Procedures,” *Bureau of Industry and Security-U.S. Department of Commerce*, August 8, 2006 <http://www.bis.doc.gov/InternationalPrograms/IndialCoopPresentation.htm>.
- “U.S.-Japan Economic Partnership for Growth,” *The Ministry of Foreign Affairs of Japan*, 30 June 2001, http://www.mofa.go.jp/region/n-america/us/pmv0106/joint_e.html.
- “U.S.-Japan Economic Ties: Status and Outlook,” *Open Congressional Research Service*, 30 September 2003, <http://openocrs.cdt.org/document/IB97015>.
- “The Unipolar Illusion Revisited: The Coming of the United States’ Unipolar Moment,” Layne, Christopher. *Project Muse: Scholarly Journals Online*, 2006, http://muse.jhu.edu/journals/international_security/v031/31.2layne.html.
- “Weapons of Mass Destruction Around the World,” *Federation of American Scientists*, 16 November 2006, <http://www.fas.org/nuke/guide/dprk/nuke/index.html>.
- World Nuclear University Participants,” *World Nuclear University*, <http://world-nuclear-university.org/html/participants/index.htm>.
- Ishiba, Shigeru. *2006 Defense of Japan*. Japan Defense Agency. Translated by Intra Group Corp, 2006.
- Ito, Kobun. “Japan’s Security in the 1970’s.” *Asian Survey* 10, no. 12 (December 1970): 1031 – 1036.
- Johnson, Chalmers. *The Sorrows of Empire: Militarism, Secrecy, and the End of the Republic*. New York: Metropolitan Books, 2004.

- Johnston, Alastair I. and Robert S. Ross, eds. *New Directions in the Study of China's Foreign Policy*. Stanford, CA: Stanford University Press, 2006.
- Kase, Yuri. "The Costs and Benefits of Japan's Nuclearization: An Insight in the 1968/1970 Internal Report." *The Nonproliferation Review* 8, no. 2 (Summer 2001): 55 – 68.
- Katzenstein, Peter J., ed. *The Culture of National Security: Norms and Identity in World Politics*. New York: Columbia University Press, 1996.
- _____. *Cultural Norms and National Security: Police and Military in Postwar Japan*. Ithaca, NY: Cornell University Press, 1996.
- _____ and Nobuo Okawara. *Japan's National Security: Structures, Norms and Policy Responses in a Changing World*. Ithaca, NY: Cornell University East Asia Program, 1993.
- _____. "Japan, Asian-Pacific Security, and the Case for Analytical Eclecticism," *International Security* 26, No. 3 (Winter 2001/2002): 153 – 185.
- Kawashima, Yutaka. *Japanese Foreign Policy at the Crossroads: Challenges and Option for the Twenty-First Century*. Washington, DC: Brookings Institution Press, 2003.
- Kawashima, Kohei. "Japan Shouldn't Tolerate Nuclear North Korea." *Yomiuri Shimibun* (Tokyo), 6 February 2003.
- Keohane, Robert O. "Theory of World Politics: Structural Realism and Beyond," in Robert O. Keohane, eds. *Neorealism and its Critics*. NY: Columbia University Press, 1986.
- Keohane, Robert O. and Joseph S. Nye. *Power and Interdependence*. New York: Harper Collins Publishers, 1989.
- Kim, Hong N. "The Sato Government and the Politics of Okinawa Reversion." *Asian Survey* 13, no. 11 (November 1973): 1021 – 1035.
- Langer, Paul F. *Japanese National Security Policy-Domestic Determinants*. Santa Monica, CA: Rand Corporation, 1972.
- Lebow, Richard and Thomas Risse-Kappen, eds. *International Relations Theory and the End of the Cold War*. New York: Columbia University Press, 1995.
- Long, William J. "Nonproliferation as a Goal of Japanese Foreign Assistance." *Asian Survey* 39, no. 2 (March – April 1999): 328 – 347.

- Mack, Andrew. "North Korea and the Bomb." *Foreign Policy* 83 (Summer 1991): 87 – 104.
- Mahbubani, Kishore. "Japan Adrift." *Foreign Policy* 88 (Autumn 1992): 126 – 144.
- Mearsheimer, John J. *The Tragedy of Great Power Politics*. New York: W. W. Norton, 2001.
- Mendel, Douglas H. "Okinawan Reversion in Retrospect." *Pacific Affairs* 48, no. 3 (Autumn 1975): 398 – 412.
- McIntosh, Malcolm. *Japan Re-armed*. New York: St. Martin's Press, 1986.
- McClain, James L. *A Modern History: Japan*. New York: W.W. Norton & Company, 2002.
- Migdal, Joel S. *Strong Societies and Weak States*. Princeton: Princeton University Press, 1988.
- Miller, Alice L. "Post Cold War Strategies." (lecture, Naval Post Graduate School, Monterey, CA, January 24, 2007).
- Monroe, Wilbur F. "Japan's Economy in the 1970's: Implications for the World." *Pacific Affairs* 45, no. 4 (Winter 1972-1973): 508 – 520.
- Morgan, Alfred D. "The Japanese War Economy: A Review." *The Far Eastern Quarterly* 8, no. 1 (November 1948): 64 – 71.
- Okita, Sbauro. "Savings and Economic Growth in Japan." *Economic Development and Cultural Change* 6, no. 1 (October 1957): 32 – 41.
- Ogata, Sadako. "Japanese Attitude toward China." *Asian Survey* 5, no. 8 (August 1965): 389 – 398.
- Ogilvie-White, Tanya. "Is There a Theory of Nuclear Proliferation? An Analysis of the Contemporary Debate." *The Nonproliferation Review* (Fall 1996): 43 –60.
- Ogoura, Kazuo. "Improving Japan – Russia Ties." *The Japan Times*, 4 June 2007.
- Olsen, Edward A. *U.S – Japan Strategic Reciprocity: A Neo-internationalist View*. Stanford, CA: Hoover Institution Press, 1985.
- Papp, Daniel S., Loch K. Johnson, and John E. Endicott. *American Foreign Policy: History, Politics, and Policy*. New York: Pearson Longman, 2005.

- Perkins, Dwight H., Steven Radelet, and David L. Lindauer. *Economics of Development*. 6th ed. New York: W. W. Norton & Company, 2006.
- Perkovich, George. *Faulty Promises: The U.S. – India Nuclear Deal*. Washington, DC: Carnegie Endowment for International Peace, 2005.
- “Pragmatism the Key to Unlock Nuke Stalemate,” *China Daily Online* (Beijing), 23 October 2006.
- Preble, Christopher. “Two Normal Countries: Rethinking the U.S.-Japan Strategic Relationship,” *Policy Analysis* 566 (April 2006).
- Purrington, Courtney. “Tokyo’s Policy Responses During the Gulf War and the Impact of the “Iraqi Shock” on Japan.” *Pacific Affairs* 65, no. 2 (Summer 1992): 161 – 181.
- Putnam, Robert D., “Diplomacy and Domestic Politics: The Logic of Two-Level Games”, in Peter B. Evans, Harold K. Jacobson, and Robert D. Putnam, eds. *Double-Edged Diplomacy: International Bargaining and Domestic Politics*. CA: University of California Press, 1993.
- Quam, Erik. “The North Korean Nuclear Test: Regional and International Implications,” *Center for Nonproliferation Studies: Monterey Institute of International Studies* (October 2006).
- Quester, George H. “Japan and the Nuclear Non-Proliferation Treaty.” *Asian Survey* 10, no. 9 (September 1970): 765 – 778.
- Radtke, Kurt W. and Raymond Feddema, eds. *Comprehensive Security in Asia: Views from Asia and the West on a Changing Security Environment*. Boston, MA: BRILL, 2000.
- Rasmussen, David C. “Credible Nuclear Deterrence for Japan.” M.A. thesis, Naval Postgraduate School, (Spring 2000).
- Rosser, J. Barkley Jr. and Marina V. Rosser. *Comparative Economics in a Transforming World Economy*. New Delhi, India: Prentice Hall, 2005.
- Ruble, Maria R. “Persuasion, Social Conformity, and Identification: Constructivist Explanations for Non-Nuclear States in a Nuclear World,” Dissertation, George Washington University, 2004.
- Russett, Bruce M., Thomas Risse-Kappen, and John J. Mearsheimer. “Back to the Future, Part III: Realism and the Realities of European Security.” *International Security* 15, no. 3 (Winter 1990 – 1991): 201 – 245.

- Sagan, Scott D. and Kenneth N. Waltz. *The Spread of Nuclear Weapons: A Debate*. New York: W. W. Norton & Company, 1995.
- Sakoda, Robin. Director of Japan Desk, DOD. Interview 18 October 2007 via email.
- Self, Benjamin L. and Jeffery W. Thompson, eds. *Japan's Nuclear Option: Security, Politics, and Policy in the 21st Century*. Washington, D.C.: The Henry L. Stimson Center, 2003.
- Schneider, Barry R. "Nuclear Proliferation and Counter-Proliferation: Policy Issues and Debates." *Mershon International Studies Review* 38, no. 2 (October 1994): 209 – 234.
- Sprinkel, Beryl W. "Further Expansion and Less Inflation in 1972." *The Journal of Business* 45, no. 1 (January 1972): 1 – 5.
- Squassoni, Sharon. *India's Nuclear Separation plan: Issues and Views*. Washington DC: CRS Report for Congress, 2006, CRS, RL33292.
- Song, Young-Sun. "Prospect for U.S.-Japan Security Cooperation." *Asian Survey* 35, no. 12 (December 1995): 1087 – 1101.
- Steiner, Jesse F. "Japan's Post-War Population Problems." *Social Forces* 31, no. 3 (March 1953): 245 – 249.
- Strunk, William Jr., and E. B. White. *The Elements of Style*. 4th Ed. New York: Longman Publishers, 2000.
- Sustar, Lee. "Containing China: The United States on the Asian chessboard." *International Socialist Review* 48, (2006): 12 – 16.
- Takizawa, Makota. "Okinawa: Reversion to Japan and Future Prospects." *Asian Survey* 11, no. 5 (May 1971): 496 – 505.
- Tamai, Tadayuki. "Debate Needed on Nuclear Issue." *The Daily Yomiuri* (Toyko), 15 November 2006.
- Tanaka, Yasumasa. "Japanese Attitudes Toward Nuclear Arms." *The Public Opinion Quarterly* 34, no. 1 (Spring 1970): 26 – 42.
- Takashi, Inoguchi. "Japan's Response to the Gulf Crisis: An Analytic Overview." *Journal of Japanese Studies* 17, no. 2 (Summer 1991): 257 – 273.
- United States American Embassy. *Daily Summary of Japanese Press*. Office of Translation and Media Analysis.

United States Congress, Office of Technology Assessment. *Proliferation of Weapons of Mass Destruction: Assessing the Risks*. OTA-ISC-559. Washington, DC: U.S. Government Printing Office (August 1993).

Walt, Stephen M. "Alliance Formation and the Balance of World Power," *International Security* 9 (Spring, 2001): 3 – 43.

Waltz, Kenneth N. *Theory of International Politics*. New York: Random House, 1979.

Wendt, Alexander. "Constructing International Politics." *International Security* 20, no. 1 (Summer 1995): 71 – 81.

Wheelan, Charles. *Naked Economics: Undressing the Dismal Science*. New York: W. W. Norton & Company, 2002.

Yahuda, Michael. *The International Politics of the Asia-Pacific: Politics in Asia*. New York: Routledge Curzon, 2004.

Zhou, Xiaoming. "Japan's Official Development Assistance Program: Pressures to Expand." *Asian Survey* 31, no. 4 (April 1991): 341 – 350.

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