CONFRONTING THE REALITY OF A RISING NUCLEAR-ARMED CHINA

Lieutenant Colonel David D. Kelley
National Defense Fellow
United States Air Force

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Harvard University
John F. Kennedy School of Government
Belfer Center for Science and International Affairs

Advisor

Dr. Martin Malin, Executive Director, Project on Managing the Atom
Belfer Center for Science and International Affairs
Kennedy School of Government, Harvard University

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Preface

The focus of this paper is on confronting the reality the United States and its allies face with a rising nuclear-armed China. The focus could just as easily have been on the growth of China's conventional weapons forces, because the same conceptual elements and challenges apply. Furthermore, it is not the author's intent to address the intricate details of each of these complicated areas as certainly a paper could be written on each of these topics by themselves. Rather the desire is to add to the broader discussion of China's rise as a regional and world power, and the inherent challenges and opportunities its rise presents for the United States, the region and the world.

An important caveat to make is that this research paper was written with a classical realist perspective on international relations and how nation states interact with each other. Classical realist "consider the principal actors in the international arena to be states, which are concerned with their own security, [and which] act in pursuit of their own national interests, and struggle for power."[1] In taking this classical realist perspective, the author is not implying that military conflict between the United States and China is inevitable. There are a number of existing variables, and other variables that have yet to emerge, that will determine the outcome between the two nations. While history does reflect that conflict is often the outcome of a power struggle between nation states, especially when one is rising, it is the hope of the author that rational actors will make rational decisions to avoid military conflict and ensure a peaceful rise.

Notes

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Abstract

The rise of a nuclear-armed China is presenting the United States and its allies in the Asia-Pacific region with a new reality that they must confront. Driven by an ideological belief that it is China's destiny to reclaim its regional preeminence, it is strategically posturing itself on both the economic and military fronts to achieve this end state. In just 43 years, China has risen from one of the weakest economies in the world to the number two economy, second only to the United States, which it is on track to surpass by 2030.

Concurrent with this economic rise has been 21 years of consistent increases in defense spending, with the 2012 expenditure an impressive 11.2 percent higher than the previous year. This increase in military spending is enabling China to grow and modernize its conventional and nuclear forces, and is dramatically improving its ability to forward project its military power in the Asia-Pacific region. China's power projection and engagement in regional territorial disputes is increasing tensions with its neighbors and driving them to increase the strength of their militaries. It is also forcing the United States to take a renewed military interest in the region to secure its own national interests and to allay the fears of its allies.

While China has been a nuclear-armed power since the mid-1960s, and has held to a minimum nuclear deterrent posture and "no first use" policy, the recent growth and modernization of its nuclear forces is indicative of a potential shift in strategic direction. When combined with a lack of transparency about its nuclear weapons force structure, capability and number of warheads, the situation is becoming more concerning. The rapid development and

fielding by the United States and Japan of ballistic missile defense systems, designed to counter the emerging threats presented by Iran, North Korea and rouge actors, is further exacerbating the situation. From China's perspective, these systems are threatening to its ability to maintain a viable retaliatory nuclear strike capability, a foundational element to it remaining with a minimum nuclear deterrent posture.

The military buildup by China, its Asia-Pacific neighbors and the United States is creating a classical security dilemma that is increasing the potential for military conflict in the region. Although history is replete with conflicts between existing and rising powers, conflict between China and the United States is not preordained. Opportunities exist in both the diplomatic and military arenas for both countries to actively engage the other in open and direct communication to increase transparency, reduce tensions, and improve understanding. It is in the best interest of the United States, China and countries around the world to confront the reality that is a rising nuclear-armed China and, in doing so, manage its accession into the regional and world order without conflict.

Chapter 1

Introduction

The Cold War between the United States and the Soviet Union ended with the fall of the Soviet Union in 1991 after 44 years of nuclear standoff. During this period, the two nuclear superpowers engaged in a fierce standoff with each other, amassing large nuclear forces and robust command and control systems in what became known as the concept of mutual assured destruction or "MAD". At the height of the Cold War the United States and the Soviet Union amassed nuclear weapons totaling approximately 31,000 and 45,000 warheads respectively.[1] Despite this numerical difference, nuclear parity, defined as "the quality or state of being equal or equivalent" was achieved between the two countries, because the ability to inflict unacceptable damage on the other existed.[2] This nuclear parity between the two superpowers existed throughout much of the Cold War and served as a stabilizing factor with each country knowing that they could destroy the other, but could not do so without being destroyed themselves.

In the end, the United States was victorious in the Cold War, not because of the use of nuclear weapons or because it vanquished the Soviet Union on the "battlefield", but rather because economically the Soviet Union crumbled. Throughout the Cold War, the Soviet Union was financially isolated from the rest of the world and did not have a robust worldwide trade to keep its economy viable and financial coffers full. This prevented it from continuing to compete

with the United States in a conventional and nuclear "arms race". Had it not been for the nuclear deterrence that existed between the two powers the outcome of the Cold War could have been far different, with one country launching nuclear Inter-Continental Ballistic Missiles (ICBM) against the other in response to a pre-emptive nuclear attack or launching its own pre-emptive act of aggression.

Following the end of the Cold War, the Soviet Union dissolved and was replaced by the Russian Federation. The nuclear weapons from the Cold War remain on alert to this day, albeit in much smaller numbers, but the high level of tension that existed between the two countries during the Cold War is greatly diminished. While these nuclear weapons continue to exist, and nuclear deterrence continues to play a role in the relations between the United States and Russia, the peace between the two countries is now based on a broader base of shared interests. Due to the Soviet Union's (and by succession the Russia Federation) financial, and by default military, crumbling the United States emerged as the hegemonic world power both militarily and economically. It has arguably maintained this status to this day influencing actions on the world stage, as well as within the Asia-Pacific region, through either direct involvement or through its regional allies.

This situation is changing, however, with the rise of a nuclear-armed China. As articulated in a 2008 joint Department of Energy and Department of Defense report that said, "During the Cold War, the greatest security concern of the United States was the military capabilities of the Soviet Union. Potential threats from China and regional states such as North Korea were considered to be lesser included cases that could be addressed by the capabilities deployed to counter the Soviet threat. The current global security environment is radically different."[3] One thing that is radically different is China's rapid emergence as an economic

powerhouse with no discernible end to its rise in sight. Concurrent with this rise, and especially in recent years, has been a significant increase in China's conventional and nuclear military capabilities. The joint government report also stated that "China, a rapidly growing economic power and the only recognized nuclear weapons state under the Nuclear Nonproliferation Treaty (NPT) that is both modernizing and expanding its nuclear force, is also a potential concern."[4]

Since this statement in 2008, China's rise as an economic and military power has occurred at an even faster pace and grown more worrisome. Unlike the Soviet Union, China has the financial power and thriving worldwide trade to fund and sustain the development of a conventional and nuclear military force that could eventually match, or even surpass, that of the United States and other world powers. In the words of former Secretary of State Dr. Henry Kissinger, "We Americans have always had the view that we did not want any country to have hegemony in Asia."[5] The rise of a nuclear-armed China is pitting it against its Asian neighbors and the United States in what is increasingly becoming a more contentious relationship.

As the same time that China's involvement in the Asia-Pacific region is expanding and its military strength continues to increase, the United States has been preoccupied prosecuting two wars in Iraq and Afghanistan. These efforts have tied up much of America's focus and military forces, but, with the conclusion of the Iraq war and the drawdown and impending conclusion of the Afghanistan war, the United States is now able to, and arguably is forced to, focus more on the Asia-Pacific region. This is essential, not only to protect its own national interests of free trade and commerce, but also to assuage fears of its allies in the area that are fueled by China's threatening posture.

If the United States does not allay these fears and reaffirm its active support, its allies in the region would be forced to increase their military forces out of self-preservation and national

security. As Richard Bitzinger, Senior Fellow at the S. Rajaratnam School of International Studies in Singapore points out, "…concerns over a rising 'China threat' or a waning US military presence in the region, [and] more localized security and military concerns are also compelling many countries in the Asia-Pacific to strengthen their military capabilities."[6] This is resulting in the growth of their militaries, which is perceived by China as a potential threat, and in turn is pushing China to further increase its forces and posturing. The net result is a further destabilizing effect on the region, perhaps providing the spark, in the future, for conflict that could lead to a disastrous and costly outcome. The increased presence of the United States military forces serve as a regional stabilizer and counter to this.

This increased presence is taking shape with an initiative by the United States to move more military forces to the Asia-Pacific region, initially referred to by government officials as "the Asia-Pacific pivot", and more recently as the "Asia-Pacific rebalancing effort". The move is indicative of how the United States views the importance of the Asia-Pacific arena to its security, as well as that of its allies. In remarks by former Secretary of State Hillary Clinton, she said of the rebalancing effort, "Our treaty alliances with Japan, South Korea, Australia, the Philippines, and Thailand are the fulcrum for our strategic turn to the Asia-Pacific."[7] The effort by the United States to focus more attention on the region is also more than just a military endeavor. It is "…intended to be a multifaceted, coordinated effort across the whole of U.S. government, focusing on several key aspects: security alliances, relationships with emerging powers, engagement with multilateral institutions, trade and investment, military presence, and democracy and human rights."[8] However, perceptions of the effort aren't the same on both sides of the fence.

While the United States, and regional allies, look at the "Asia-Pacific rebalancing effort" as a stabilizing initiative, China takes a different viewpoint. China, through its Ministry of Defense and Ministry of Foreign Affairs, criticized the U.S. Navy's plan to ''reposture its forces from today's roughly 50/50 percent split between the Pacific and the Atlantic to about a 60/40 split'' as ''not conducive to security and mutual trust'' and ''inappropriate.''[9] The United States has attempted to mollify China's concerns that the initiative is not directed at it specifically, but rather the entire region. During the 2011 bilateral Defense Consultative Talks in Beijing, then Undersecretary of Defense for Policy Michele Flournoy told the Chinese Deputy Chief of the General Staff General Ma Xiaotian, ''We assured General Ma and his delegation that the U.S. does not seek to contain China: We do not view China as an adversary. These posture changes were first and foremost about strengthening our alliance with Australia."[10] The United States and its allies must confront the reality and implications of a rising nuclear-armed China and its ambition to be the preeminent Asian power that it sees as its destiny.

This paper will briefly address the ideological underpinnings that drive China's rise, as well as its impending economic supremacy over the United States. It is this economic might that is funding year after year growth in China's defense budget and increasing its military might. The paper will also look at the emergence of China as a power player in Asia-Pacific regional affairs and the resulting instability and turmoil this is causing with its neighbors and the United States. Next, this paper will delve into the growth of China's military focusing specifically on its nuclear policies and forces. In doing, so the paper will also identify how technological developments pose a perceived challenge to China's limited nuclear forces and how this will drive China to change its nuclear force structure. Finally, this paper will conclude by highlighting the potential for conflict and providing some recommendations of how the

relationship between China, its regional neighbors and the United States can be managed to reduce some of the tension points and avoid potential military conflict.

Notes

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[9] Ibid., 145.
[10] Ibid., 139.

Chapter 2

Ideological and Economic Rise of China

> *"America's exceptionalism finds it natural to condition its conduct toward other societies on their acceptance of American values. Most Chinese see their country's rise not as a challenge to America, but as heralding a return to the normal state of affairs when China was preeminent."*
>
> -- Former Secretary of State Henry Kissinger[1]

Key to the reality of a rising nuclear-armed China is its desire to be Asia's preeminent power and its need for national security. Understanding China's ideology and how its economic rise in relation to other Asia-Pacific neighbors and the United States plays into its actions and shapes its future path helps in setting the foundation. Confucius said, "Study the past if you would define the future."[2] In the case of China, its past greatly shaped its ideology and need for preeminence. In its simplest form, ideology is "a manner or the content of thinking characteristic of an individual, group, or culture."[3] Put in the context of China, its ideology was formed over its more than 4,000 year history of Asian dominance. This dominance came to an end and China's ideology was dramatically changed during the period of 1840 to 1945 when "the loss of China's traditional hegemony in Asia, when tribute states such as Annam, Siam, Burma, Laos and Korea became Western or Japanese colonies, and the so-called 'unequal treaties,' by which the Western powers forced their conditions upon China, were felt to be a deep humiliation. Later

this humiliation was even "instilled into the pupil's mind" to arouse nationalistic feelings. This feeling of humiliation became part of China's national identity."[4] Over this roughly 100 year period, China fought against the oppression of Western and/or Japanese entities and, in many cases its people suffered at the hands of its oppressors. China's war against Japanese forces ended at the conclusion of World War II, but not before dramatically changing China's views with a steadfast desire to never again be subjugated to the whims of an outside power. This change in viewpoint is poignantly captured in the following comments by Marshal Nie Rongzhen, a high ranking General in the People's Liberation Army (PLA), member of the Politburo Standing Committee of the Communist Party of China and head of China's nuclear armaments program:[5]

> "My attitude was clear throughout. For more than a century, imperialists had frequently bullied, humiliated and oppressed China. To put an end to this situation, we had to develop sophisticated weapons such as the guided missile and the atomic bomb, so that we would have the minimum means of reprisal if attacked by the imperialist with nuclear weapons."[6]

The end of World War II marked a new chapter in China's history with the inception of the People's Republic of China in 1949. With this chapter being written, China's ideology became a driving force toward recapturing its regional preeminence and achieving its destiny. Former Australian Prime Minister Kevin Rudd stated, "China also sees its rise in the context of its national history, as the final repudiation of a century of foreign humiliation (beginning with the Opium Wars and ending with the Japanese occupation) and as the country's return to its proper status as a great civilization with a respected place among the world's leading states."[7] This belief is further expanded on by Lee Kuan Yew, considered "the founding father of modern Singapore and its prime minister from 1959 to 1990" and trusted advisor to numerous heads of

state on China issues, when he was asked the question, "Are Chinese leaders serious about displacing the US as Asia's predominant power?" Lee Kuan Yew said, "Why not, their reawakened sense of destiny is an overpowering force."[8] It is this "overpowering force" that drives China, but not without the understanding that in order for it to reclaim its preeminence in the region it must move strategically to dominate both economically and militarily.

China's drive for economic dominance is clear. Undeniably, China is an economic powerhouse that has seen its position in the world move from being one of the weakest economies in the world in the 1970s to the number two economy a mere 43 years later, second only to the United States.[9] By many estimates, China will overtake the United States to become the largest economic force in the world as early as 2030.[10] While China has continued to grow, the United States economy has suffered dramatically in recent years and the government has racked up a record debt in excess of $16 trillion, with more than $1.2 trillion in debt held by China, the largest of any foreign country.[11] This economic superiority creates a perception of China having strong leverage ability over the United States. As former Secretary of State Clinton rhetorically asked, "How do you deal toughly with your banker?"[12]

China's economic strength is limited, however, as a coercive tool over the United States due to the intertwined nature of both economies. This stands in stark contrast to the Cold War situation between the United States and the Soviet Union, where each economy stood on its own without much, if any, interlinking. If China imposes economic sanctions against the United States or reduces trade its country suffers as well. Indeed, China could take severe action, such as selling its dollar holdings to economically "hurt" the United States, but in doing so it would wreak havoc on its own economy, which is irrevocably tied to that of the United States through trade of China's products.[13] As Joseph Nye, Jr., University Distinguished Service Professor at

Harvard University points out, "If it dumped its dollars, China would bring the United States to its knees, but might also bring itself to its ankles."[14] The $1.2 trillion in debt held by China hamstrings them as well.

This symbiotic economic relationship also puts a limitation on China's use of its economic power for conflict resolution and Chinese leaders fully understand this. Professor Nye goes on to explain that "In February 2010, angered over U.S. sales to Taiwan, a group of senior military officers called for the Chinese government to sell off U.S. government bonds in retaliation, but their suggestion was not heeded."[15] The suggestions were not heeded because of the ramifications for China's economy and because of the escalatory nature of doing so. Without the ability to decisively affect the outcome of a country to country conflict via its economic power, China is forced to seek military equivalency with the United States, in order to achieve a preeminent regional power position.

The United States' economic weakness provides the perfect opportunity and sufficient time for China to increase its military capability. The country's dire economic situation has bled over into the budget of the Department of Defense. Although the defense budget has nearly doubled in the years since 9/11 and the initiation of wars in Iraq and Afghanistan, the current budget crisis will result in a reduction of upwards of $500 billion over a 10 year period, and potentially an additional $500 billion over the same period given the consequences of a budget cutting process called "sequestration".[16] The former Chairman of the Joint Chiefs of Staff went on record in August of 2010 to highlight the peril the national debt has placed the country in. During remarks to CNN, Admiral Mike Mullen stated, "The most significant threat to our national security is our debt."[17]

At the same time that the United States is suffering a budget crisis and reductions in defense spending, China is continuing to increase its defense spending. As reported by the U.S.-China Economic and Security Review Commission, "China's official 2012 defense budget, released on March 4, is $106 billion. An 11.2 percent increase from last year, the budget also marks the 21st consecutive year-on-year increase."[18] As also reported by the Commission, China's official defense budget, which puts it second in defense spending after the United States, is estimated by the Stockholm International Peace Research Institute to be as much as 50% greater than the official number, with the United States Department of Defense pegging China's military spending at $120-$180 billion.[19] In reading China's defense white paper titled, "China's National Defense in 2010", one cannot help but get the impression that China's PLA is a modern military on the rise. This rise is in keeping with its goal since its inception in 1949 when "the PLA set a general guideline and objective of building outstanding, modernized and revolutionary armed forces."[20]

China's military buildup is an area of great national security concern and is receiving attention at the highest levels of the Unites States government. According to Representative Michael R. Turner, Chairman, Strategic Forces Subcommittee, House Armed Services Committee in his June 2012 remarks at the International Assessment and Strategy Center Luncheon, "China's unprecedented military buildup requires that we, as prudent national security thinkers, must plan for the worst, hope for the best and determine how to make clear to China where our interests lie. China need not be a threat, but if our history proves one thing, it is that American timidity encourages aggression."[21]

The "timidity" that Congressman Turner mentions could be perceived by China as a sign of weakness and opportunity to be exploited in the long term. As Dr. Kissinger points out,

"China seeks its objectives by careful study, patience and the accumulation of nuances – only rarely does China risk a winner-take-all showdown."[22] China understands that, at least this early in its rise to preeminence, militarily it is not ready for a showdown with the United States. During interviews by renowned nuclear policy expert Graham Allison, Director, Belfer Center for Science and International Affairs at Harvard's John F. Kennedy School of Government, and Robert Blackwill, International Council Member, Belfer Center for Science and International Affairs at Harvard University, Lee Kuan Yew expressed the belief that "…it is highly unlikely that China would choose to confront the US military at this point, since it is still at a clear technological and military disadvantage."[23] However, as evidenced by its large expenditure on its defense budget, and, as will be discussed later in this paper, its significant growth and modernization of its nuclear capabilities, China is gradually closing the capability gap between the two countries. Although it may take 20 to 30 years to close this gap, the Chinese are on a steady trajectory toward this end state and doing so as inconspicuously as possible. Again, referencing Dr. Kissinger "…one may hide one's light and bide one's time, as Deng Ziaoping famously advised his colleagues to do in 1991, telling them to maintain good relations with the United States while building up China's strength."[24]

China has gradually ascended the power ladder to once again become a power player in the Asian arena. As Dr. Kissinger states, "…China is not a rising country. China is a country that is returning to what it believes is has always been, namely, the center of Asian affairs. But it's inevitable that a rising China will impinge on the United States."[25] Once the gap is closed sufficiently to compete with the United States as a military near-peer or peer equivalent, it is likely China will become an even more forceful participant in setting the agenda in the Asia-Pacific region.

Notes

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Chapter 3

Emergence of China as a Regional Power

> *"As long as nuclear weapons exist, the United States must sustain a safe, secure, and effective nuclear arsenal – to maintain strategic stability with other major nuclear powers, deter potential adversaries, and reassure our allies and partners of our security commitments to them."*
>
> -- Former Secretary of Defense Robert M. Gates[1]

Concurrent with its economic rise, and in keeping with its ideological desire to once again be the predominant Asian superpower, China has increased its reach beyond its borders engaging in territorial disputes with its neighbors. The impetus behind its willingness to engage in these disputes can be linked to "an increasingly modern PLA [that] has allowed China to be more assertive, particularly in pursuit of its territorial claims in the East and South China seas."[2] With this expansion there has been a marked increase in inflammatory rhetoric between China, its neighbors and the United States as a result of, and further contributing to, Asia-Pacific regional instability.

This is a shift from years past when China tended to take a more reserved approach focusing primarily on its internal issues and its economic growth. China, however, insists that it is not pushing beyond its borders and interfering in regional affairs. On September 27, 2012 China, through its Foreign Minister Yang Jiechi, stressed at the United Nations Assembly's General Debate the philosophy that "China does not interfere in the internal affairs of other

countries or impose its will on others, and China does not allow outside forces to interfere in its internal affairs."[3] China's words can be perceived as an attempt to avoid creating or reinforcing the concerns of its neighbors and the United States that an emerging China poses a threat. Concerns of this sort would have the counterproductive effect of forcing these countries to coalesce to an even greater extent and seek additional support from the United States. To further expand on this idea, Professor Joseph Nye said, "Too aggressive a Chinese military posture could produce a countervailing coalition among its neighbors that would weaken both its hard and soft power."[4] Unfortunately, China's actions in the region stand in contrast to its statements as it has begun to impose its will on its neighbors.

Regardless of the reason for the United States' "Asia-Pacific rebalancing effort" or the reason for China's increased involvement in regional affairs, the opportunity for conflict is higher and readily apparent in three specific areas: Diaoyu/Senkaku Islands; Spratly Islands; and Taiwan. It is helpful to briefly address these areas as they have the potential to spark a conflict between China and the United States, and are indicative of the reality of a rising nuclear-armed China.

The first area of potential conflict is the sovereignty dispute between China and Japan over the Diaoyu Islands (China's name for the islands) and Senkaku Islands (Japan's name for the islands). Figure 1 depicts the orientation of the islands in relation to China and Japan. Although the territorial dispute dates back to the early 1970s, there has been an increase in vitriol in the past couple of years due to actions by both countries, which has pushed the issue to the forefront and increased the possibility of conflict. The recent "purchase" of the islands by the Japanese government sparked outrage by the Chinese government and further inflamed the issue.

According to Chinese Foreign Ministry Spokesperson Liu Weimin's remarks on the Japanese Government's plan to "buy" the Diaoyu Islands,

> "The Diaoyu Island and its affiliated islands have been China's inherent territory since ancient times, for which China has indisputable historical and jurisprudential evidence. Nobody is ever allowed to trade in China's sacred territory. The Chinese Government will continue to take necessary measures to resolutely safeguard its sovereignty over the Diaoyu Island and its affiliated islands."[5]

Japan's perspective on the issue, as stated by Japanese Foreign Minister Seiji Maehara, is that the "…Senkaku Islands, in terms of history and international law, are inherent territory of Japan and have – we have had control over the islands and will continue to do so."[6]

Figure 1 – East China Sea Map[7]

If a military conflict between China and Japan breaks out over the islands, the United States would be compelled to come to the aid of Japan as a result of the U.S.-Japan mutual security agreement. Former Secretary of State Clinton reaffirmed this position in 2010 when she stated, ‘‘the United States has never taken a position on sovereignty, but we have made it very clear that the islands are part of our mutual treaty obligations, and the obligation to defend Japan.’’[8] As a result of this, any conflict between China and Japan would draw the United States in and place it in direct conflict with China dramatically escalating the situation.

Another regional hot spot is the Paracel Islands and the Spratly Islands which is a multi-country sovereignty and jurisdictional dispute involving six Asia-Pacific countries. “The Paracel Islands, in the South China Sea’s northwest, are claimed and occupied by China and are also claimed by Taiwan and Vietnam. The Spratly Islands, in the South China Sea’s southeast, are claimed in whole or in part by Brunei, China, the Philippines, Malaysia, Taiwan, and Vietnam.”[9] Figure 2 below provides a visual reference of the various territorial claims involved in the dispute.

Figure 2 – Sovereignty Claims in the South China Sea[10]

While the situation is extremely complex given the sheer quantity of claimants and the intricate role of national identity, at the center of the disputes is China and the perception by the other dispute participants that it is using its growing military muscle to influence the situation despite its claims otherwise. To counterbalance the perceived threat, defense spending by Indonesia, the Philippines, Malaysia, Singapore, and Vietnam are all increasing as a result of the territorial dispute with China. As reported by the U.S.-Economic and Security Review Commission, "China's military modernization and the lack of transparency surrounding it drives tensions in the region and has prompted the other claimant countries to bolster their own maritime capabilities. According to *IHS Jane's,* defense spending by Southeast Asian countries grew by 13.5 percent in 2011, to $24.5 billion, and will likely reach $40 billion by 2016."[11] This increase in defense spending creates a vicious circle driving involved parties to further expand their military forces contributing to increased regional destabilization.

The final regional hot spot that will be addressed surrounds the sovereignty of Taiwan itself, which is also involved in the above Spratly Island dispute. At the core of the decades old issue is Taiwan's desire for independence from China, which China vehemently opposes and has threatened the use of force to prevent. Should direct hostilities occur between China and Taiwan the United States would be brought into the conflict via the Taiwan Relations Act of 1979, which serves as a pseudo defense agreement between the United States and Taiwan and states, "to maintain the capacity of the United States to resist any resort to force or other forms of coercion."[12]

The relations between China and Taiwan have seen periods of increased tension and past comments by Chinese leaders have indicated the severity with which they view the situation. In

July 15, 2005, Major General Zhu Chenghu, of China's National Defense University, made the statement that:

> "If the Americans are determined to interfere [in a conflict to defend Taiwan] we will be determined to respond. We Chinese will prepare ourselves for the destruction of all cities east of Xian. Of course, the Americans will have to be prepared that hundreds…of cities will be destroyed by the Chinese…War logic dictates that a weaker power needs to use maximum efforts to defeat a stronger rival…We have no capability to fight a conventional war against the United States…We can't win this kind of war."[13]

This is perhaps one of the most hard line statements made on the issue as it implies the use of nuclear weapons due to the inability to win a conventional war against the United States. It is representative of the challenge of escalation control that could arise should a conflict break out. The Chinese view this situation so seriously that "…over the past year, the PLA continued to build the capabilities and develop the doctrine it considers necessary to deter Taiwan from declaring independence, to deter, delay, and deny effective U.S. intervention in a potential cross-Strait conflict; and to defeat Taiwan forces in the event of hostilities."[14]

Despite this military buildup, diplomatic and trade relations between China and Taiwan have improved since March 2008 with the election of Taiwan President Ma Ying-jeo.[15] This has opened the door to joint efforts by the Chinese and Taiwan governments to improve relations, which was highlighted in China's 2010 National Defense white paper that stated, "…the two sides have enhanced political mutual trust, conducted consultations and dialogues, and reached a series of agreements for realizing direct and bilateral exchanges of mail, transport and trade, as well as promoting economic and financial cooperation across the Straits."[16]

The primary event that could dramatically shift the dynamic from "improved relations" to "active conflict" is an actual declaration of independence by Taiwan. Chinese State Councilor Dai Bingguo made China's position quite clear in a 2010 essay when he said:

> "The Taiwan question is related to the reunification and territorial integrity of China. It concerns the core interests of China and touches on the national sentiment of 1.3 billion Chinese people....On the Taiwan question, we pursue the fundamental guideline of "peaceful reunification, and one country, two systems." [But] we will absolutely not allow Taiwan to be separated from China and will definitely make no promise to give up the use of force."[17]

As former Secretary of State Clinton said, "At the end of the day, there is no handbook for the evolving U.S.-China relationship. But the stakes are much too high for us to fail."[18] History is not a predictor of the future, but how China and the United States view each other's actions in the Asia-Pacific region can play a pivotal role in the outcome. When viewed through the eyes of the United States, China's actions are cause for concern. As asserted in the first chapter of this paper, China believes its destiny is to be the preeminent Asian power. With this in mind, China's rapid economic and military growth can be seen as threatening in and of itself. Add to this the on-going disputes in the Diaoyu/Senkaku Islands, Spratly Islands and Taiwan, and it is easy to understand why China's regional neighbors and the United States are concerned.

From China's perspective, the actions of the United States in the Asia-Pacific region could equally be viewed with suspicion and angst. Going back as far as the early 1800s Americans' appetite for westward expansionism was readily on display in what became known as "Manifest Destiny".[19] And, certainly more recent actions could be cause for concern when viewed from the other side. As Aaron Friedberg points out, when looking at the world situation from China's viewpoint, "Having watched America topple the Soviet Union through a

combination of confrontation and subversion, since the end of the Cold War China's strategist have feared that Washington intends to do the same to them."[20] Looking at even more historical examples, the United States' military actions in Korea, Vietnam, Iraq, Libya and still on going in Afghanistan could cause further concern. When speaking about misperceptions each country has about the other's intent, former Secretary of State Clinton said, "The fact is that a thriving America is good for China and a thriving China is good for America. We both have much more to gain from cooperation than from conflict. But you cannot build a relationship on aspirations alone."[21]

As is evident by the above, how countries view others' actions is not infrequently a matter of biased perception and uncertainty. University of Chicago Professor John J. Mearsheimer provided useful insight into this concept when he stated, "Unfortunately, states can never be certain about each other's intentions. They cannot know with a high degree of certainty whether they are dealing with a revisionist state or a status quo power. Intentions are in the minds of decision makers and they are especially difficult to discern."[22]

There is a possibility with any of the above issues that a regional conflict could erupt that would bring the United States military forces into direct action against Chinese forces. It likely would not be an intentional action that would incite the conflict, but rather it would be an incident that is improperly handled and is allowed to escalate through miscalculation and fervent nationalism. At least in the near term, China is aware that it is not militarily capable of prevailing in a direct military conflict with the United States, so that may help dampen any move toward military engagement. In Lee Kuan Yew's view, "it is highly unlikely that China would choose to confront the US military at this point, since it is still at a clear technological and military disadvantage. This means that in the near term, they will be more concerned with using

diplomacy, not force, in their foreign policy."[23] However, should diplomacy fail or an unintended escalation occur leading to conflict, it would enter into an unknown area fraught with peril. Since the invention and only use of nuclear weapons in 1945, there has never been a direct large scale force on force war between two major nuclear weapons powers. It is unlikely that if these conflicts erupted they would lead to a nuclear war, but during times of war, especially between two nuclear superpowers, the opportunities to head down a slippery slope are abundant, especially when viewed through the lenses of suspicion, misperception and uncertainty.

Notes

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[10] Office of the Secretary of Defense. "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2012", May 2012. Available on-line at: http://www.defense.gov/pubs/pdfs/2012_CMPR_Final.pdf, 37.

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Chapter 4

China's Nuclear Policies and Forces

> *"China has had a fully functional and operating nuclear weapons infrastructure for over thirty years and is the only major nuclear power that is expanding the size of its nuclear arsenal. It is qualitatively and quantitatively modernizing its nuclear forces, developing and deploying new classes of missiles, upgrading older missile systems, and developing methods to counter ballistic missile defenses.*
>
> -- Department of Energy and Department of Defense[1]

In the preceding chapters, this paper reviewed the ideological and economic impact of China's rise, as well as its emergence as a regional Asia-Pacific power with increased engagement in territorial disputes. This chapter will address the growth of China's military focusing specifically on its nuclear policies and forces, and how technological developments pose a challenge to China's limited nuclear forces and drive it to modernize them.

Deterrence Theory

Before delving into these areas it is beneficial to briefly address what nuclear deterrence theory is, and for that matter, is not. The United States Department of Defense defines deterrence as "The prevention of action by the existence of a credible threat of unacceptable counteraction and/or belief that the cost of action outweighs the perceived benefits."[2] Expanded

further, the requisite components of nuclear deterrence theory are capability (i.e. credible threat) plus intent (i.e. belief). The "capability" must be a viable weapon system capable of delivering nuclear kinetic effects on an enemy. The "intent" must be expressed as a willingness by the government to use the nuclear weapons should a nuclear attack be launched against it or its allies. In order for nuclear deterrence to be achieved, the country being deterred must fully understand the existence and robustness of both elements, and it must also fully believe that the capability could be used against it. If it believes that either the capability is lacking or the intent is not resolute, deterrence is weakened at best and ineffective at worst. Deterrence theory is not, however, a "magic theory" that ensures nuclear war will not occur. The success of nuclear deterrence relies on rational actors making rational decisions. The rational actors must understand that to wage nuclear war is to enter into the unthinkable with unprecedented loss of life and devastating physical and environmental destruction.

This concept has arguably been pivotal to the past 67 years being free of nuclear war between the United States and Russian nuclear superpowers. The Cuban Missile Crisis was the only time in those 67 years that the two superpowers directly locked horns and almost exchanged nuclear blows, but even then deterrence theory came into play. Both the United States and Russia believed the other had both the capability and the intent necessary to employ nuclear weapons and, as a result, backed away from the precipice rather than suffer horrible casualties in the tens of millions of lives lost.

Within the Asia-Pacific region the United States provides its own nuclear deterrent protecting its vital interests, and also extends a "nuclear umbrella" over Japan, South Korea and its other allies in the region, referred to as "extended deterrence". In a 2009 speech referring to nuclear weapons, the President of the United States reaffirmed that "as long as these weapons

exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies…"[3] Going back to the concept of nuclear deterrence, this "extended deterrence" provides the safety and security that keeps Japan, South Korea and other friendly non-nuclear weapon states from developing and maintaining their own nuclear weapons, and states with existing nuclear weapons from developing a more robust nuclear force, both in capability and capacity. During a 2008 U.S.-China Strategic Nuclear Dynamics conference in Beijing, China, a Chinese participant referring to the extended nuclear deterrence provided to Japan by the United States stated, "China cannot have it both ways – a non-nuclear Japan and no extended deterrence."[4] This extended deterrence also serves as a counter-balance against non-ally nuclear nations such as China, maintaining stability for all involved.

Nuclear Policies

China achieved its nuclear weapons capability in the mid-1960s, becoming only the 5th nation at that time to have nuclear weapons, the other four being the United States, Russia, United Kingdom and France. From its inception, China has followed a nuclear strategy of "minimum deterrence", which means that it maintains the minimum number of nuclear weapons and capability to achieve a deterrent effect and to achieve an assured retaliatory second strike. This position was recently reaffirmed in its 2010 National Defense White Paper that stated China "will limit its nuclear capabilities to the minimum level required for national security."[5] Deng Xiaoping, a key architect of China's nuclear policy and former Chinese leader, expressed this belief about the value of a limited nuclear weapons capability:

> "While you have some deterrence force, we also have some; but we don't want much. It will do just to possess it. Things like strategic weapons and deterrence forces are there to scare others. They must not be used first. But our possession will have some effect. The limited possession of nuclear weapons itself exert some pressure. It remains our position that we will develop a little (nuclear weapons). But the development will be limited. We have said repeatedly that our small amount (of nuclear weapons) is nothing. It is only to show that we also have what you have. If you want to destroy us, you yourself have to suffer some punishment at the same time."[6]

The key element in this policy is the ability to inflict "punishment" on the enemy. To achieve this, and as part of its minimum deterrence policy, China has relied on a strong belief that it can achieve its strategic goals and security by having a small arsenal of long-range nuclear weapons capable of launching a retaliatory strike against an attacking enemy. This concept is captured in remarks by former Chinese Ambassador for Disarmament Affairs Sha Zukang

> "I must emphasize that "strategic balance" and "strategic parity" are two different concepts. [A] nuclear weapon is [a] kind of special weapon. Due to its gigantic destructive force, to achieve strategic balance among nuclear countries [China] does not need to possess the same amount of nuclear weapons. As far as the medium and small nuclear countries are concerned, after being hit by the first nuclear strike, as long as they still possess the capability of launching the second nuclear strike to inflict unbearable losses to the attacking side, they can still reach a certain kind of strategic balance with major nuclear countries which possess quantitative and qualitative superiority of nuclear weapons."[7]

With this in mind, and in keeping with a minimum deterrence and retaliatory strike mentality, the stated position of China's government has been a no first use philosophy. In its 2010 National Defense White Paper, "China consistently upholds the policy of no first use of nuclear weapons, adheres to a self-defensive nuclear strategy, and will never enter into a nuclear arms race with any other country."[8] Of the nine nuclear weapons states, which include Russia, China, the United States, England, France, India, Pakistan, North Korea and Israel (which does

not officially confirm or deny the existence of nuclear weapons), only China, India and North Korea have publicly stated a "no first use" policy.[9] The other six countries either have no stated policy or maintain the right of first use in defense of its nation. China has pressed the United States and other nations to join it in declaring a "no first use" policy, including in its 2010 National Defense White Paper:

> "China holds that … all nuclear-weapon states should abandon any nuclear deterrence policy based on first use of nuclear weapons, make an unequivocal commitment that under no circumstances will they use or threaten to use nuclear weapons against non-nuclear-weapon states or nuclear-weapons-free zones, and negotiate an international legal instrument in this regard."[10]

One challenge of a "no first use" policy is that there is no way to ensure that during a future crisis the country, in this case China, will actually adhere to its stated policy. According to Bruno Tertrais, Senior Research Fellow at the Foundation for Strategic Research, "declaratory policy, or 'what states claim they would do', is distinct from 'action policies', or states' plans for a conflict, and thus does not necessarily restrict nuclear policy."[11] The inability to verify a future action based on a current stated policy creates an atmosphere of distrust between China and the United States. This differs from physical capability based verifications, like the ones that occur between the United States and Russia as part of the Strategic Arms Reduction Treaty, which build a level of trust. It is easier during a crisis to not adhere to a stated policy, than it is to employ weapons that either don't exist or have a limited capability and have been verified to be in compliance through transparent verification processes.

Another challenge is that minimum deterrence and "no first use" policies, in their basic forms, are only sound as long as the weapons, and the command and control infrastructure required to launch the weapons, survive the first strike and a retaliatory strike is achievable. If,

however, this ability is removed, either through an overwhelmingly devastating first strike attack or through an enemy's effective defensive capability, such as missile defense, then the ability to conduct a secondary strike is negated. Although the Chinese presently do not believe the United States has the capability to prevent a retaliatory second strike, they are uncertain this will be the case in the future. "Many in China fear that U.S. military power, in the future, could be directed at coercing China. On a second level, on nuclear affairs the Chinese concern is that the United States seeks to develop the strategic military tool-kit, as envisioned in the 2001 NPR, with the hope of escaping relationships of mutual vulnerability with other nuclear powers, including especially China, so that it can be free to exercise military power at will."[12] This fear, whether realistic or not, is being used by China as a motivating factor in defining its nuclear weapons capability. As further evidence of this fear, it was identified during the 2006 "U.S.-China Strategic Nuclear Dialogue", that the Chinese:

> "…worry that their security environment is deteriorating, with an evolving nuclear competition in South Asia and a worsening security situation in North Korea. China already faces several "nuclear triangles" – China-North Korea-U.S.; China-India-Pakistan; China-Russia-U.S – that involve complex deterrence relationships. Chinese also fear additional nuclear powers in Northeast Asia. China also worries about U.S. strategic policy that seems to increasingly rely on nuclear weapons. This heightens anxieties about China's standing relative to the U.S.: while Chinese see their rise as inevitable, they also acknowledge that their country is weak at present."[13]

In the years since 2006 some of these tensions have eased, but they still remain a significant factor in China's decision calculus, especially its perception of weakness relative to the United States and other regional entities. This directly affects its sense of security and threatens its drive for regional preeminence. China's most recent 2010 National Defense White Paper gives a current assessment of its viewpoint on Asia-Pacific relations, "…Asia-Pacific

security is becoming more intricate and volatile. Regional pressure points drag on and without solution in sight."[14] Some of this concern involves the previously mentioned regional disputes, but also identifies China's concern about the role of the United States, specifically its belief that "The United States is reinforcing its regional military alliances, and increasing its involvement in regional security affairs."[15] China's anxiety about its standing relative to the United States is likely reinforced from its viewpoint when looking at the 2012 Office of Secretary of Defense report to Congress which states, "In concert with Allies and partners, the United States will continue adapting its forces, posture, and operational concepts to maintain a stable and secure Asia-Pacific security environment."[16]

As long as China believes it has the minimum nuclear deterrence and the resulting assured retaliatory second strike that underpins its nuclear policy, it can keep its inventory of nuclear weapons relatively small. However, if this "belief" is threatened, the number of weapons and their capability would need to increase to the point that China once again believes it has achieved minimum deterrence and a sense of security.

Impact of Ballistic Missile Defense Systems

A threat to this belief is exactly what is taking place as a result of the United States' development of a ballistic missile defense (BMD) system that is seen by China as destabilizing to its minimum deterrence capability and security. This concern was highlighted during dialogue between China and the United States as captured in the following statement, "…BMD development and deployment is by far the most significant factor impacting China's nuclear calculus. China has to think how to maintain a guaranteed retaliatory second strike capability in

the face of a U.S. BMD system."[17] The destabilizing effect of BMD from China's viewpoint is further captured in its 2010 National Defense White Paper, "China maintains that the global missile defense program will be detrimental to international strategic balance and stability, will undermine international and regional security, and will have a negative impact on the process of nuclear disarmament."[18]

An additional consideration for China is that Japan has developed its own ballistic missile defense system at a cost of $12 billion "to protect itself from North Korea's machinations and from potential threats from China" and "now has the most sophisticated missile-defense system outside the U.S., a system poised for export to other nations."[19] This development is being harshly criticized by Chinese officials as further destabilizing and threatening to its small nuclear force.[20]

The United States does not see its own BMD system as destabilizing to its nuclear deterrence posture with China, because it is not developing the BMD system as a counter to China's ICBM force, but rather as a defense for itself and its allies against potential attacks by North Korea, Iran or other nation states or rogue actors. Development of this system has become a necessity for the United States and its allies because:

> "The increasing technology transfer and missile proliferation could render traditional deterrence and diplomacy ineffective against a future missile attack on the U.S., our deployed forces, or our allies. Through its capabilities for defending critical nodes, military assets, and seats of government, missile defense enhances existing non-proliferation activities. Missile defenses can provide a permanent presence in a region and discourage adversaries from believing they can use ballistic missiles to coerce or intimidate the U.S. or its allies."[21]

The assurance that the BMD system is not being developed to counter China's ICBMs was also included in the 2010 Ballistic Missile Defense Review Report, "Today, only Russia and China

have the capability to conduct a large-scale ballistic missile attack on the territory of the United States, but this is very unlikely and not the focus of U.S. BMD."[22] In President Barack Obama's February 2013 State of the Union speech, he also reaffirmed the intent behind the United States continuing to develop its BMD system to counter threats posed by rogue nations when he said, "…as we stand by our allies, strengthen our own missile defense, and lead the world in taking firm action in response to these threats."[23] Unfortunately, conveying the message does not mean it is believed by the other side and overcoming the mistrust that exists between the two countries with regard to the intent of the other is a challenging feat.

As a result of the continued development of BMD systems, Major General Zhu Chenghu, of China's National Defense University stated, China "will have to modernize its nuclear arsenal" because the deployment of a missile defense system "may reduce the credibility of its nuclear deterrence."[24] In its present design and capability set, the BMD system is not capable of stopping a large scale attack. It is primarily effective against a small and very limited nuclear weapons capability and, at best, it would only be able to reduce the number of launched Chinese ICBMs. A growing concern from China's side, however, is that the rapid technological advancement of BMD systems will achieve the ability to completely destroy or greatly reduce the number of ICBMs from China and other nuclear weapon states that rely on a retaliatory second strike capability and only possess a limited number of nuclear weapons. As stated by the Institute for Defence Studies and Analyses organization,

> "The US efforts to improve and expand its BMD system would degrade Chinese nuclear retaliatory capability thus making China's nuclear deterrence less effective. This would force Beijing to initiate efforts to go for a qualitative and quantitative improvement of its nuclear force by increasing and improving its nuclear force structure by deploying more ballistic missiles with MIRV and MARV capability and penetration aids."[25]

This position is further supported by Dr. Hui Zhang, an acknowledged expert on Chinese nuclear policy at Harvard University's John F. Kennedy School of Government, who points out "There is one circumstance that could push China to expand its arsenal significantly – continued development of US missile defenses that might neutralize a Chinese second strike. In fact, such development could become a major driver that speeds China's nuclear modernization."[26] As a result of its continued development, BMD systems have become a driving force for additional Chinese nuclear weapons growth, as well as modernization efforts of its nuclear weapons arsenal. This is a reality the United States and other nations will need to confront.

Nuclear Weapons Secrecy

While China has been fairly open about its minimal nuclear deterrent and no first use policies, it has been very guarded about discussing or revealing details on its nuclear weapons force structure, capability and even the number of nuclear weapons it possesses. As stated in the 2012 U.S.-China Economic and Security Review Commission report, ''Beijing believes the transparency of its nuclear strategy and nuclear doctrine is more important than that of the force posture and that the opacity of its force posture can serve to enhance the 'deterrence effect' of its small nuclear force.''[27] The Chinese see their secrecy as a stabilizing factor in that it creates a level of uncertainty for the enemy about exactly how powerful it is. Gregory Kulacki, a senior analyst and the China project manager in the Global Security Program at the Union of Concerned Scientists, reviewed PLA Second Artillery Force (PLASAF) textbooks and identified that "the

Second Artillery text makes clear that the objective of its nuclear operations is to create uncertainty and confuse the United States."[28]

This environment of secrecy and uncertainty, however, can actually have the effect of creating instability. During the U.S.-China Strategic Nuclear Dialogue Conference, it was highlighted that "the U.S. is concerned that unless it has a firm understanding and gains more transparency into China's nuclear program and intentions, the U.S., as well as Russia, will be less willing to continue nuclear stockpile reductions. This is particularly the case in the context of the modernization of China's nuclear stockpile."[29] This secrecy and uncertainty is further expanded upon in the Department of Defense's 2010 Nuclear Posture Review:

> "At the same time, the United States and China's Asian neighbors remain concerned about China's current military modernization efforts, including its qualitative and quantitative modernization of its nuclear arsenal. China's nuclear arsenal remains much smaller than the arsenals of Russia and the United States. But the lack of transparency surrounding its nuclear programs – their pace and scope, as well as the strategy and doctrine that guides them – raises questions about China's future strategic intentions."[30]

This policy of secrecy about existing force structure stands in stark contrast to the United States, which has been relatively transparent on force structure and posturing, especially as of late, with open discussion of numbers of weapons on alert, the budgetary constraints it faces in modernizing its nuclear force structure, and the President's stated desire to achieve a "global zero" end result.

Further contributing to the secrecy and instability is the existence of a vast network of tunnels in which China is hiding its mobile land based ballistic missiles and associated support equipment (Figure 3). The tunnel system is estimated to consist of over 3,000 miles of tunnels that "are hundreds of meters underground, in deep mountainous areas, and are difficult to detect

from space.[31] Designed to withstand nuclear and conventional blasts, Dr. Zhang, believes China's underground tunnel system is defensive in nature and is designed to protect and ensure the survivability of China's limited nuclear weapons during a first strike and provide an assured retaliatory second strike.[32] This certainly could be the reason for the tunnels, but it is also possible that the tunnels provide a method for China to conceal the true size and capability of its nuclear forces. The result of the tunnels has been to create further suspicion amongst the United States and China's Asia-Pacific neighbors.

Figure 3 – China's Underground Tunnel System[33]

The pattern of secrecy has also caused significant uncertainty by outside governments about the actual size of China's nuclear arsenal. This uncertainty, especially about the number of warheads it possesses, has resulted in a wide disparity among official estimates. As shown in

Figure 4 below, some estimates put the Chinese nuclear arsenal as low as 100 nuclear warheads, while others estimate the number could be as high as 1,800 warheads. The large delta is the result of China's secrecy and isn't seen in the warhead estimates for the other nuclear powers.

Country	Operational Strategic	Operational Nonstrategic	Reserve/ Nondeployed	Military Stockpile	Total Inventory
Russia	1,800 (1,550)	0	3,700	5,500	10,000
U.S.	1,950 (1,550)	200	2,850	5,000	8,000
France	290	N/A	?	300	300
UK	160	N/A	65	225	225
Israel	0	N/A	80	80	80
Pakistan	0	N/A	90–110	90–110	90–110
India	0	N/A	80–100	80–100	80–100
North Korea	0	N/A	<10	<10	<10
China					

Source	Estimated Total Inventory
— *Testimony to Commission*	100–200
— *Hui Zhang*	166
— *Various*	240
— *Perry-Schlesinger Commission*	100–200
— *Taiwan Ministry of National Defense*	450–500
— *IISS Military Balance (modified)*	526
— *Viktor Yesin*	1,600–1,800

Figure 4 – World Nuclear Forces – 2012 Estimate[34]

Further uncertainty about China's nuclear arsenal is seen in the United States government's estimates of the number of current and projected ICBM warheads. Figure 5 shows the variety of estimates from official government agencies over the past twelve years and how the estimates by particular agencies of existing and projected number of warheads have changed

as the years have progressed. These ICBM warheads are of particular concern to the United States due to their ability to reach around the globe and impact the North American continent.

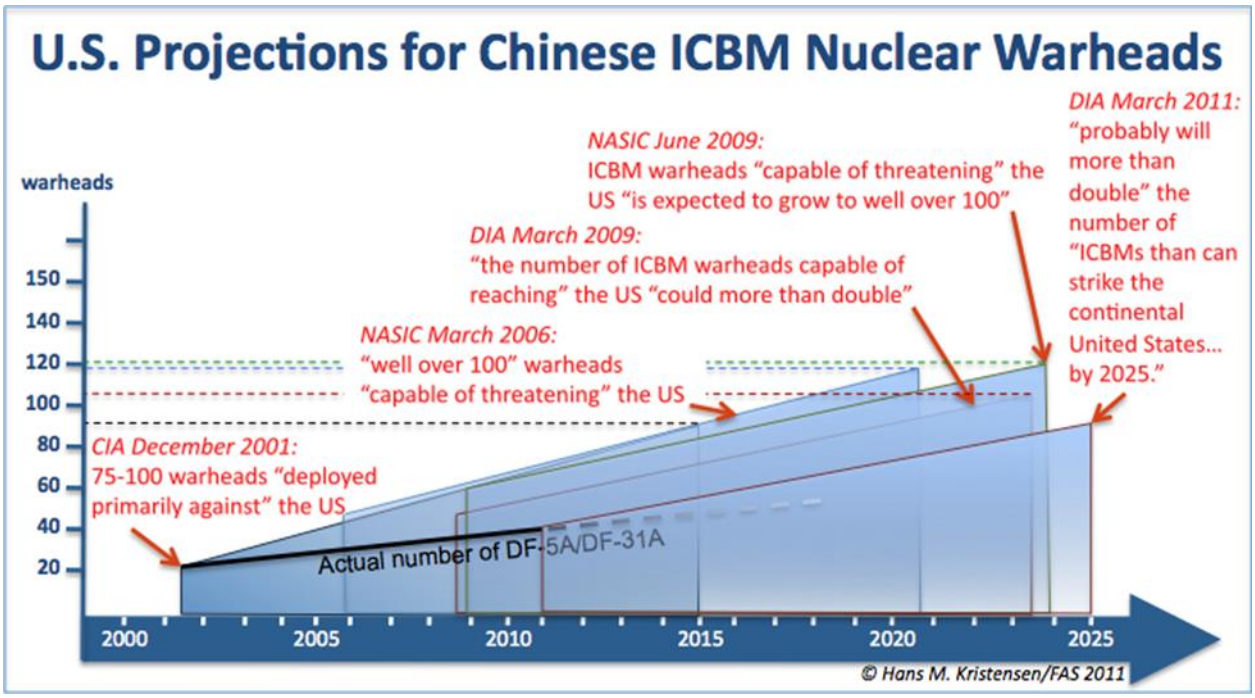

Figure 5 – U.S. Projections for Chinese ICBM Nuclear Warheads[35]

This uncertainty is not reflective of a lack of effort to determine more precise numbers and projections by government agencies, but rather it highlights the dilemma created by the secrecy of the Chinese government. This, in turn, creates suspicion by other nations about China's true intent and capability, and forces them to respond accordingly to ensure their own national security. In dealing with nuclear weapons uncertainty is not conducive to stability.

Growth and Modernization

At a time when the United States and Russia are negotiating nuclear force reductions, China is modernizing and expanding its military forces to include its nuclear weapons arsenal. "China's leaders view modernization of the Chinese People's Liberation Army (PLA) as an essential component of their strategy to take advantage of what they perceive to be a 'window of strategic opportunity' to advance China's national development during the first two decades of the 21st century."[36] China's modernization of its nuclear weapons capability involves all three facets of land, sea and air, and with further investment of time and resources will give China a viable nuclear triad. According to the U.S.-China Economic and Security Review Commission "China has made a series of quantitative and qualitative improvements to its nuclear forces. China is on the cusp, perhaps within two years, of attaining a true ''nuclear triad'' of land-based ballistic missiles, submarine-launched ballistic missiles, and air-dropped nuclear bombs."[37] The growth and modernization of China's nuclear forces is taking place at a rapid pace, arguably to support its rise as a predominant regional power and to counter advances in ballistic missile defense technology, as previously discussed. According to the United States Defense Intelligence Agency 2012 Threat Assessment:

> "China's strategic missile force, the Second Artillery, currently has fewer than 50 ICBMs that can strike the continental United States, but it probably will more than double that number by 2025. To modernize the nuclear missile force, China is adding more survivable road-mobile systems, enhancing its silo-based systems, and developing a sea-based nuclear deterrent. The Navy is developing the JIN-class nuclear powered ballistic missile submarine and JL-2 submarine-launched ballistic missile, which may reach initial operational capability around 2014."[38]

The PLASAF is entrusted with the nation's well established land based nuclear forces and is charged with executing the nuclear and conventional missile mission.[39] A stated objective of the PLASAF is "…to push forward its modernization and improve its capabilities in rapid reaction, penetration, precision strike, damage infliction, protection, and survivability, while steadily enhancing its capabilities in strategic deterrence and defensive operations."[40] This modernization effort is receiving a significant level of attention by the United States, including during a recent report to Congress in 2012. The U.S.-China Economic and Security Review Commission reported that

> "In conjunction with a broader, military-wide modernization program, China has over the past two decades made a series of quantitative and qualitative improvements to its nuclear forces. New classes of missiles, designed for greater mobility, reliability, and reach, incorporate features to ensure their ability to overcome adversary defenses and strike their targets."[41]

If launched, China's current nuclear ICBMs are capable of striking targets throughout most of the world as reflected in Figure 6 below showing the ranges of China's various ICBMs.

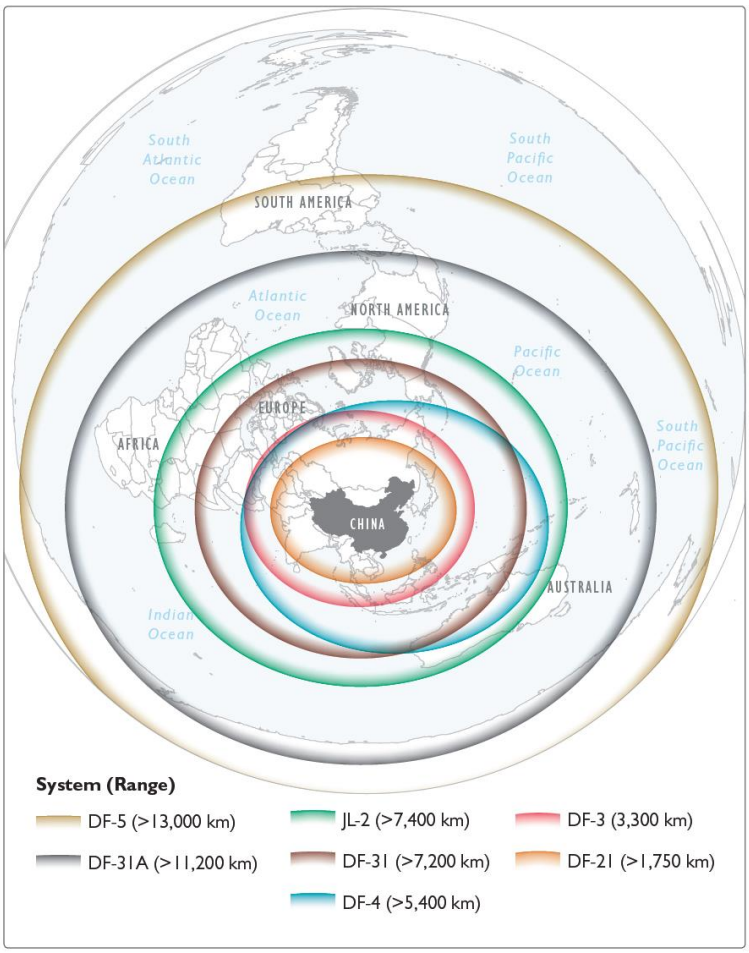

Figure 6 – China's Missile Ranges[42]

According to the United States Department of Defense, "China is capable of targeting its nuclear forces throughout the region and most of the world, including the continental United States. Newer systems, such as the DF-31, DF-31A, and JL-2, will give China a more survivable nuclear force."[43] Further evidence of China's land based ICBM modernization efforts occurred in 2012 with test launches of the Dong Feng-41 missile. This new missile is a road mobile ICBM with a maximum range of 14,000km and is believed to have the ability to carry up to 10 multiple independently targetable reentry vehicles (MIRV), providing a potentially overwhelming challenge to any missile defense system engagement.[44]

One possible reason for China's growth and modernization of its nuclear forces could be attributed strictly to insuring its ability to launch a retaliatory strike and overcome BMD systems as Chinese participants stressed during the 2008 "U.S.-China Strategic Nuclear Dynamics" Conference:

> "China will continue to modernize gradually its nuclear forces to ensure that China remains a credible retaliatory or "counter-strike" capability. China's singular focus in its nuclear modernization is on improving its survivability, reliability, safety and the ability to penetrate missile defenses. Chinese participants stressed that this does not require a major increase in the size of its nuclear force structure, but that China will respond to the strategic capabilities of other nations as needed."[45]

Or another reason for the growth and modernization could be that China is seeking to increase its nuclear capability to further advance its return to preeminence and to better situate itself as a regional powerhouse. In response to a question about "China potentially increasing the MIRVing of its land- and sea-based ballistic missiles", Dr. James N. Miller, Principal Deputy Under Secretary of Defense for Policy, stated during Congressional testimony,

> "We are concerned about the pace and scope of the modernization of China's nuclear capabilities, both quantitatively and qualitatively. We are also concerned about the lack of transparency regarding the strategy and doctrine guiding this effort. Moreover, the overall lack of transparency surrounding China's nuclear programs and capabilities raises questions about China's future strategic intentions and makes it difficult to assess the future nuclear balance."[46]

Regardless of what the driver behind the growth and modernization of China's nuclear arsenal is, the United States and its allies must confront the reality that is a rising nuclear-armed China. In doing so, they must understand the destabilizing effect a loss of

nuclear deterrence and assured retaliatory strike, whether real or perceived, would have if a conflict or outright war occurred between the United States, its allies and China. The secrecy that surrounds China's nuclear programs creates an environment rich for concern and misunderstanding by the United States and China's regional neighbors, and significantly contributes to a destabilized situation. Action must be taken by all parties to mitigate these issues to the greatest extent possible.

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Chapter 5

Conclusion

China is rapidly growing into both a military and economic superpower, and the United States, and the world for that matter, must confront the significant challenges that this rise presents. In confronting this reality, however, conflict between the two countries need not be preordained, but it is a potential outcome if the relationship is not handled correctly. There are measures that both countries can take to manage the current relationship to avoid military conflict and improve the long-term prospects.

The Asia-Pacific territorial disputes, combined with China's drive for regional preeminence, have created a classical security dilemma, which is "a situation in which actions taken by a country can actually undermine the security and stability that they were meant to increase. Arms acquisitions by one state, even if it has no desire to threaten its neighbors, can lead to anxieties and feelings of insecurities in nearby states."[1] The effect of this "classical security dilemma" is that as China's military forces increase in size and capability, and begin to factor more heavily in regional affairs, the military forces of its neighbors must increase in size and capability to counter the perceived threat. Additionally, the United States' "Asia-Pacific rebalancing effort" results in additional forces in the region further adding to the security dilemma. China, in turn, must increase its military forces to reaffirm its security and a resulting build-up of forces and potential threats occurs. As tensions in the region increase the potential

for miscalculation, accidental engagement, and the impact of nationalism create an environment ripe for conflict with the potential for dangerous escalation.

There is no simple answer to reducing these regional tensions, because nationalism, suspicion and security needs play such critical roles. The most promising approach is to ensure that open, frequent, and effective communication occurs between all involved parties to avoid misunderstandings and clarify positions. The United Nations plays a critical role in helping to resolve the disputes by acting as a mediation authority, and the United States must continue to reassure China that containment of China is not a desired goal of its involvement in the region.

At the same time, the United States must reassure its allies that it will not withdraw from the international obligations it has assumed over the years and turn its focus and monetary resources to solving its economic problems at home.[2] While these problems do need to be solved, the resolution should not come at the expense of the significant role the United States plays in regional and international affairs, and overall world security and stability. As former Secretary of State Clinton pointed out, "Strategically, maintaining peace and security across the Asia-Pacific is increasingly crucial to global progress, whether through defending freedom of navigation in the South China Sea, countering the proliferation efforts of North Korea, or ensuring transparency in the military activities of the region's key players."[3] Isolationism as a strategic strategy does not work as evidenced by events leading up to World War II where the United States attempted to remain disengaged from the problems beyond its shores. Ignoring the challenges of a rising China, and the resulting Asia-Pacific disputes, will only push the issues to a future point where conflict is more likely and the resolution far more costly in effort, blood and treasure.

The United States must also confront the growth and modernization of China's nuclear forces. In the face of improving ballistic missile defense capabilities of both the United States and Japan, which China perceives as a threat to its minimum deterrence and retaliatory strike capability, China will continue to grow and modernize its nuclear weapons capability. To do otherwise, creates a destabilizing situation from China's perspective resulting in it feeling exposed and threatened … a situation China certainly cannot and will not live with.

The United States must continue its aforementioned efforts to reassure China that the BMD systems are being developed as a necessary element to ensuring its own national security by preventing nuclear ballistic missile attacks by countries like Iran and North Korea, and are not meant to defeat China's ICBM capability. This communication effort can be further enhanced through robust military-to-military engagements, which have taken place in the past, but should occur on a more frequent basis. The importance of these dialogues was highlighted by Former Secretary of Defense Leon Panetta during a 2012 visit by Chinese Defense Minister Liang Guanglie when he said, "our military-to-military dialogue is critical to ensuring that we avoid dangerous misunderstandings and misperceptions that could lead to [a] crisis."[4] The United States can also help to alleviate China's, and other countries', BMD concerns by developing shared data streams on missile launches as has been proposed in the past with Russia. This sharing of data, and the transparency it conveys, could help reduce concerns about intent and capability, as well as help other countries' response in the event there is a missile launch from Iran, North Korea, or a rouge actor. While initial efforts may only consist of data sharing, future endeavors could evolve into shared data operations centers, where representatives from foreign countries sit side by side on the "operations floor" monitoring the applicable systems. This effort

would create an opportunity for further relationship building, and increased understanding and demystifying of the other nations' intent.

In confronting the growth and modernization of China's nuclear forces, the United States, through open and frequent dialogue, must convince China that the secrecy and opaqueness surrounding its nuclear weapons capability is having a detrimental effect on China's national security and is creating an environment of suspicion and mistrust. China, for its part, must diligently work to remove the uncertainty surrounding its nuclear capabilities through transparent efforts, which will greatly help increase the confidence and trust of its neighbors and the United States. This openness, in turn, will create a more stable environment. Using the time proven Strategic Arms Reduction Treaty verification processes that occur between Russia and the United States, as an example, may help China to overcome some of its concerns.

This is by no means a comprehensive list of potential opportunities and methods for managing the relationship, but rather is provided to convey the message that open, transparent, and honest communication are essential to confronting the reality of a rising nuclear-armed China. These communications must span both the diplomatic and military continuums, addressing strategic interests and concerns of each side, to find common interests on which to further build and strengthen the existing relationships. As identified by former Australian Prime Minister Rudd, the relationship would benefit by "introducing a new framework for cooperation with China that recognizes the reality of the two countries' strategic competition, defines key areas of shared interests to work and act on, and thereby begins to narrow the yawning trust gap between the two countries. Executed properly, such a strategy would do no harm, run few risks, and deliver real results."[5] The identified strategic concerns then provide opportunities for either

mitigation or resolution, or, in the absence of either, agreeing to disagree having been better for the dialogue.

While the United States should not seek a confrontation with China, it also should not seek a policy of appeasement that would have little chance of succeeding. As noted by Aaron Friedberg, "Successful policies of appeasement are conceivable in theory, but in practice have proven devilishly difficult to implement."[6] The United States must remain true to its interests and convictions, as well as those of its allies, and resolute in its approach. A strategy of positive inducement and open communication is a far more practical approach than appeasement with a greater chance of success.

If effective management of the relationship does not occur, then the United States and China will almost certainly be faced with a challenge that Professor Allison often asks, "Can China and the US escape Thucydides's trap?"[7] In his writings and lectures, Professor Allison compares China and the United States to Athens and Sparta in the 5th century BC, noting that "it was the rise of Athens and the fear that this inspired in Sparta that made war inevitable."[8] While history is not a predictor of the future, there are certainly a number of examples where Thucydide's Trap became a reality.

> "In six of seven historical cases where one power approximated or surpassed another, conflict occurred. Those were: Spain versus Holland in the 16th century; Holland versus England in the 17th century; Britain versus France in both the 18th and 19th centuries; France and Britain versus Germany in the 20th century; Germany versus Russia in 1914 and then again (as the Soviet Union) in 1941. Finally, the Soviet Union engaged the US and its allies in the Cold War after 1945. The last, thankfully, did not lead to outright war, but it nearly did on a number of occasions. The one case in which a great power surpassed the prevailing hegemon without war was when the US overtook Great Britain."[9]

Professor Allison goes on to note that, "The fact that war would be devastating for both nations is relevant but not decisive. Recall the first world war, in which all the combatants lost what they treasured most."[10] It is in the interest of all nations that the United States and China avoid "Thucydides Trap", because as Dr. Kissinger points out, "In the American – Chinese relationship, the overriding reality is that neither country will ever be able to dominate the other and that conflict between them would exhaust their societies"[11]

This research paper has shown that China is modernizing its nuclear weapons, expanding its military role in the Asia-Pacific region and seeks to be the preeminent Asian power. What cannot be determined, and only history will show, is if China's rise will be peaceful or if it will mirror the path of other rising powers in history that have led to war. Given the lack of transparency and the suspicious nature of the relationship only the Chinese leadership truly knows if its intentions are peaceful, or if it is merely biding its time until it has reached a peer level as military equals. Regardless of which outcome comes to pass, the United States and other countries must confront the reality of a rising nuclear-armed China.

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Glossary

BMD	Ballistic Missile Defense
CNN	Cable News Network
DF	Dong Feng
ICBM	Inter-Continental Ballistic Missile
JL	Ju Lang
MAD	Mutual Assured Destruction
MARV	Maneuverable Reentry Vehicle
MIRV	Multiple Independently Targetable Reentry Vehicle
NPR	Nuclear Posture Review
NPT	Non Proliferation Treaty
PLA	People's Liberation Army
PLASAF	People's Liberation Army Second Artillery Force
U.S.	United States

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