

PEERS:
HOW A GLOBAL ECONOMY AND INFORMATION TECHNOLOGY HAVE
EQUALIZED POWER IN WORLD POLITICS

A Thesis Presented

by

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ABSTRACT

PEERS:

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EQUALIZED POWER IN WORLD POLITICS

December 2012

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The global economy and information technology are at the center of our world, and as a result, play a significant role in international relations and the balance of power. The economic interdependency and technological evolution of the twenty-first century have equalized power between the United States and China. However, international discourse has largely determined the balance of power using Cold War methods that have focused on military power, and little has been done to conceptualize economic globalization and information technology as the new currencies in twenty-first century politics. States no longer need to rely on a large and advanced military to project power and threaten force to achieve political goals. The interdependency created by economic globalization and simplicity of power projection through cyber space have diminished the utility of

military power, opening the door for China to become a power peer of the United States. China has compensated for an underdeveloped economy and weak military by capitalizing on low-value added manufacturing and the efficiency of information technology. However, as China continues to grow and its standard of living increases, communism will begin to constrain its power. Nevertheless, because the United States and China currently lead the international community, Washington and Beijing must adopt policies of cooperation and engagement.

DEDICATION

I dedicate my thesis to the two loves of my life: my husband, Erich, who encouraged me to write about China and has supported me throughout my graduate studies. His dreams for me are boundless. And, my daughter, Adalin, who is the light of my life and shows me the joys life has to offer.

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CHAPTER 1

PURPOSE AND INTRODUCTION

Purpose

Information technology and an open world economy have altered the power dynamics between states and equalized power between the United States and China. These new variables have changed the way we live and view the world, including how governments and political leaders make decisions. The countries most impacted by the global economy and information technology are China and the United States. The increasing economic interdependence has suspended the ability of the United States to act unilaterally, while the creation of digital infrastructure has simplified power projection capabilities. The economic and technological evolution of the twenty-first century necessitates new research and theories to explain how the balance of power between the United States and China has been transformed. As the world shrinks through an interconnected economy and the rapid transmission of data across the globe in cyber space, the combined efforts of the United States and China to solve global issues becomes increasingly important. This article will argue how economic interdependency and the ease of power projection created by cyber technology have equalized power between the United States and China.

Economic power and cyber power offer a stronger understanding of power relations in the twenty-first century. Global economics and cyber space have linked the world together in a manner that the United States no longer has the “capacity to project dominating power and influence anywhere in the world” (Miller, 2005). Even though the conventional power resources of the United States and China are not equal, Beijing as well as Washington’s interests now shapes the political outcomes of world politics and U.S.-Sino relations. Whereas once requiring a fleet of aircraft carriers and a sophisticated military, economic globalization and information technology have allowed China to project power globally without the world’s strongest economy and military, and large cultural appeal. Exerting economic pressuring and moving electrons across the globe are far cheaper and quicker than moving large ships long distances (Nye, 2011a). Consequently, the United States can no longer wield unrestricted power and influence on international intercourse in the pursuit of state’s interests. The United States continues to play a consequential role in world politics leading and managing the global order; however, globalization and information technology have downgraded American power. The twenty-first century cultivates equality rather than supremacy. As a result, China is now a valuable partner in international relations, and Washington needs to adopt policies that unite China and the United States rather than create division.

Literature Review

Analyses of China's power and the implications for the United States have received ample attention within academic and policy discourse. However, information technology has little currency in the theories of international relations, which have failed to conceptualize information technology as a powerful factor within explanations of change in global affairs (Fritsch, 2011). "Although technology often is implicitly present in the theories, it is often interpreted as an external, passive, apolitical, and residual factor" (Fritsch, 2011, abstract). One of the main contentions of this thesis is that information technology is a primary factor in determining the political calculations of leaders more so than military force.

Military force is universally accepted, with few exceptions, as "the ultimate form of power" (Nye, 2011b). "Military force allows the United States to employ force without war, pressuring other countries into making concessions by shifting military units around or putting them on alert" (Beckley, 2011, p. 48). However, China is capable of achieving desired outcomes without the use or threat of military force by relying only on economic and cyber power. Global trade and information technology have a greater role, because political leaders are more concerned with an economic crisis or a cyber attack than a military invasion. The literature offers a broad review of the impact of globalization on the balance of power; yet, lacks sufficient analysis of the impact of information technology.

This thesis examines how both opening the world economy and information technology together impacts the balance of power between the United

States and China. The United States maintained a significant power advantage over China during much of the Cold War. However, an open world economy and information technologies have equalized the partnership and has given China the power in international relations to achieve political goals. Information technology pervades every aspect of our lives, and therefore, every aspect of international relations (Fritsch, 2011). The United States is heavily dependent on information technology for defense and military purposes, banking, energy and transportation as well as to deliver power, fuel and water across the country; therefore, increasing its vulnerabilities to cyber attacks. According to Shawn Henry (2011) of the Federal Bureau of Investigation, “cyber threats are an existential one, meaning that a major cyber attack could potentially wipe out whole companies. It could shut down our electric grid or water supply. It could cause serious damage to parts of our cities, and ultimately even kill people”. President Obama (2011) has made cyber security a priority of his administration declaring, “Failing to invest in the security of America’s digital infrastructure is no longer acceptable”. Information technology opens the door for China to easily and repeatedly attack the United States from abroad threatening national security and economic competitiveness. “U.S. officials, including National Security Agency Director General Keith Alexander and House Intelligence Committee Chairman Mike Rogers (R-Mich.), have warned that China has engaged in cyber espionage campaigns against the United States to steal American intellectual property” and national security information (United States House of Representatives, 2012, The Hill Section, para. 8).

China's power remains constrained by a communist system that limits freedom of expression and blocks resources for fostering indigenous innovation and technology. "Developing the country's innovation capacity is a prerequisite for escaping from a pattern of specialization characterized by intensive use of low-skilled labor and natural resources and a low level of technological capabilities"(Organization for Economic Cooperation, 2007, p. 59). "Innovation creates wealth and tends to beget further innovation as individual discoveries spawn multiple derivative products and improvements" (Beckley, 2011, p. 56). Thus, China must innovate to maintain a power peer relationship with the United States. Currently, China relies heavily on foreign companies and imports for technology. The acquisition of technology through foreign direct investment or imports for reverse engineering without the capability to "assimilate, adapt and improve imported technologies," however, offers limited advantages and "leads to dependency on foreign technology" (Cong, 2004a). Steve Jobs (2006), the founder of Apple, once said in an interview, "Innovation distinguishes between a leader and a follower." Therefore, so long as technology is acquired through foreign companies and imports, China is jeopardizing its current power position.

This thesis contends that while the longevity of China's power is constrained, current power is conceived of its economic success and emphasis on cyber forces. Unlike during the Cold War when political decisions were defined by a race to space and arms competition, trade relations and cyber security determine the political decisions of the twenty-first century.

Power

Power is the juggernaut of international relations. States are constantly seeking it, politicians are always protecting it, and the global balance of power is continuously in flux. Power is an important variable of international relations, because power enables a state to control or influence the decisions of others and shapes the direction and outcome of global affairs. International standards in trade, economics, security and humanitarianism are determined by the global balance of power. Big guns and large militaries no longer determine a nation-state's ability to wield influence and project power globally. As the world's reliance on global commerce and information technology increases, economic and cyber power are the new variables in the political calculations of leaders rather than the threat of military attack that characterized the Cold War. Militaries and military equipment, economies, financial operations and domestic infrastructures can become paralyzed once a nation-state's digital infrastructure is compromised, rendering an all-powerful military useless. Thus, a global economy and information technology have equalized power between the United States and China.

Information technology reduces the advantage of military power projection. Conventional military power would be largely irrelevant if a cyber holocaust were to occur, because information technology controls every aspect of our lives and can easily be disrupted with a swipe of a keyboard. From bank accounts and cash registers to energy infrastructures and communication systems, a cyber attack can cripple the national economy and security of the United States

from L.A. to New York. And as the green revolution sweeps the world and people are incentivized to use less paper, financial records can easily be lost leading to financial and economic chaos. In 2008 two cyber attacks occurred that cost consumers and businesses millions of dollars and is a shocking example of the destruction caused by a cyber attack on America's financial system.

The Center for Strategic International Studies reported the following:

“Police discovered a highly sophisticated supply chain attack where credit card readers made in China and used in UK supermarkets had a wireless device inserted in them. The device copies a credit card when it is inserted, stores the data, and transfers the data it has collected once a day via WiFi connection to Lahore, Pakistan. Estimated loss is \$50 million or more. The device could be instructed to collect only certain kinds of cards (such as gold cards), or to go dormant to evade detection. Again in 2008, hackers breached networks at Royal Bank of Scotland's WorldPay, allowing them to clone 100 ATM cards and withdraw over \$9 million dollars from machines in 49 cities” (Significant Cyber Attacks Since 2006, para 27 and 28).

In contrast, a military attack impacts a specific location—a factory, a town, a community; whereas, a cyber attack can impact every person, in every home, in every location across the country causing greater physical and financial injury, greater panic and greater damages.

The rise of China is the most commanding example of how economic globalization and information technology have transformed the balance of power in world politics. The power gap between Washington and Beijing has diminished, leading China to become an equal power to the United States. China is a weaker nation in terms of conventional power resources, yet Beijing has successfully challenged the United States and forced concessions in world politics. China is not a military threat to the United States. However, the rise of

China's economic strength and increasing cyber capabilities puts their leaders in a strong position to alter international relations. China may be a dominating figure in world politics today, but Communism will prevent China from maintaining a power peer relationship. As a result, the United States will return to being the world's only superpower.

This thesis examines how China's power and influence is equal to the United States due to economic globalization, and because cyber technology has changed the ease of power projection. Economic interdependency limits the United States' ability to make decisions without weighing the risks and benefits to U.S.-Sino relations. Global trade requires cooperation and forces concessions from the United States that wasn't characteristic of U.S. foreign policy prior to the end of the Cold War. Outside the threat of military power, the United States no longer dominates world politics. Even though the United States maintains the largest economy and most desired culture worldwide, globalization and the invention of information technology has allowed China to emerge as a power peer to the United States.

Beijing's global influence has been expanding since President Nixon opened the doors in 1972. As a permanent member of the UN Security Council and the second largest economy in the world, China has been able to influence the outcome of global events and project power worldwide through economic force and cyber capabilities, which impedes American world power. Beijing has successfully leveraged China's untapped market and low-cost manufacturing opportunities for power within international affairs. As nation-states seek

bilateral and multilateral economic relations with China, the stake of each country in maintaining good relations with Beijing increases (Andrews *et al*, 2007).

Countries bow to the pressures from Beijing in order to access the Chinese market and cheap labor; thus, diminishing American power and global influence.

The Pew Research Center (2011) reported that China was viewed as powerful or more powerful than the United States. The success of the Chinese economy is directly responsible for the change in the perceived and actual global balance of power. Beijing has accrued power by conditioning loans or “denying access to its huge consumer market as punishment to those who are against its interests”, and “could make its displeasure felt by being uncooperative on international issues or policies that require its support.” (Yew, 2010). For example, China recently vetoed a UN Security Council resolution to impose sanctions on Syria for the violence aimed at civilians, igniting outrage in Washington and across the Western world. China has also blocked attempts by the West to impose sanctions on Iran for pursuit of nuclear weapons. Even though China’s economy is substantially smaller, more fragile and less developed than that of the United States, the interdependency of the global economy has curbed America’s influence on world politics, particularly relative to China.

Economic globalization has deeply integrated the international economy making diplomacy and compromise increasingly necessary and complex. China’s rise as an economic giant is testimony to the complications globalization has on power. The interdependency and interconnectivity of the American and Chinese economies have shifted the balance of power between the two nations. The

United States can no longer set the international economic agenda and influence monetary policy as before, and the world no longer blindly follows the policies or decisions of Washington. Once unwilling to go against the United States for fear of losing foreign aid, economic benefits or preferential treatment, the international community is viewing China as an alternative to the United States giving Beijing greater power and confidence.

The United States is not declining in power (relative or otherwise) to China, and China's power is not exceeding that of the United States. Rather, globalization and the invention of information technology have altered how power is measured and exercised. Beijing is capable of altering the decisions of interlocutors and the course of world politics. Though not equals in what Joseph Nye refers to as power resources, China and the United States have become power peers in international affairs, because they dominate international relations and project power globally.

The New Balance of Power

The United States and China are equal partners in shaping world politics and competing for influence among the international community. Power in conventional terms still exists in the international system as measured by military, economics and culture; but, globalization and the emergence of information technology have altered the conditions of power, specifically for the United States and China, in favor of a more parallel system. Once the ultimate form of power in international relations, military force no longer produces the same desired

outcomes once expected. Economic globalization and information technology have added a new element to power in international relations. An open world economy has generated such a high degree of dependency for economic success that China and the United States are forced to surrender national interests for wealth and prosperity (at least to a certain degree). And, in a world where militaries rely on information networks, computers manage the economy and popular culture is centered on Twitter and Facebook, cyber power is the nuclear weapon of the 21st century.

The military, economic, political and soft powers of a country are under the command of cyber forces. Therefore, conventional power resources are easily disrupted and manipulated, weakening their utility in power relations and world politics, while magnifying the role of cyberpower. This raises the question: to what extent does conventional power resources matter in the era of cyberspace? When the military, infrastructures, communications, finance and economy of a nation can be disabled remotely with keystrokes and mouse clicks, cyber power is the great equalizer of international relations. Military, economic and soft power undoubtedly continues to play a role in power politics and diplomacy, but to a lesser degree. As a result, the balance of power between the United States and China has transformed. However, the political structure of the Chinese Communist Party is likely to contain any further power increase in power while fostering a decline.

This thesis has four chapters. Chapter two will analyze the elements of China's power, including both conventional and modern power. Chapter three

will review examples of China's influence in world politics and bilateral relations in order to understand the change in the international balance of power between the United States and China as a result of globalization and information technology, and chapter four will examine the constraints to China's continued rise and the likelihood of a decline in influence. This thesis will conclude by discussing the implications of a power peer relationship with China for the United States.

CHAPTER 2

ELEMENTS OF CHINA'S POWER

The United States is the most powerful country in the world based on military strength, economic capital and cultural appeal. No other country, including China, equals American global dominance in conventional power resources. And while many political leaders and mainstream citizens fear that the United States is declining in a burgeoning Sino-centric world, America's preeminence over China cannot be based solely on calculations of GDP or even military technology. Economic globalization and information technology have blurred the lines between economic and military power. Globalization and information technology compensates for an underdeveloped economy and less advanced military. Therefore, China need not be equal in resources to be equal in power with the United States.

China achieves greater power in global politics as their economic development grows. China's GDP and role in global trade make the Asian nation a force in international relations, which is impacting the existing hierarchical political system in which the United States, in partnership with the European Union, is the leader. Prior to the establishment of global trade and finance

organizations, the United States maintained a significant power advantage in US-Sino relations. However, due to China's economic expansion,

“China's ability to influence institutions (and therefore politics) has grown steadily over the last 5-10 years, and has spiked even higher in the aftermath of the global financial crisis. This growing influence is visible across a spectrum of issues, ranging from the institutional culture within organizations to substantive issues of policy” (The Economic Strategy Institute, 2011).

As a result, many scholars, pundits and politicians predict that the international order is currently undergoing a power transition that has China overturning the American postwar order in favor of a Sino-centric international structure. However, the evidence suggests the new balance of power resembles more of a peer relationship than either American or Sino sided.

The Elements

China's conventional power resources are growing exponentially. However, despite China's surge in influence and esteem, the United States is still stronger in terms of economic, military and cultural strength. Military force remains important to protect national interests and soft power helps reduce threats to national security. Yet, the world is in a period in which global networks of trade and cyber space are the cornerstones of national security and interests, and are therefore the most important aspects in determining the balance of power between the United States and China.

Economic Power

The most commonly recognized and quoted form of Chinese power is economic. Economic power is influence and authority derived from the

production and trade of goods and services. “Manipulating the asymmetries of (economic) interdependence is an important dimension of economic power” (Nye, 2011a, p. 55). “Since 1978, by shedding central planning, creating a market economy, and opening up to the world, China has revived itself as an economic powerhouse and a world power” (Shirk, 2007, p. 4). But the question on the minds of many Americans is China’s emergence as an economic superpower to the detriment of the United States.

The People’s Republic of China has experienced unprecedented economic growth rates for nearly 30 years to become the second largest economy in the world. Originating as a centrally planned autarky under Chairman Mao, China now represents an open and globally competitive economy based on market-oriented principles. In 1978, China implemented an economic reform project that transformed the coast along the southeastern border into “special economic zones in which the rural communes were dismantled, and the peasants were given control of the land on long-term leases and encouraged to market their own produce” (Jacques, 2009, p. 153). Since implementing these economic reforms, China’s economy has flourished with an average annual growth rate of 10 percent. In 2010, despite the global economic downturn, China achieved a growth rate of 10.3 percent and 9.1 percent respectively to become the world’s largest exporter; signaling to many that China remains ominous to the United States (The Central Intelligence Agency of the United States, 2011).

“China became a top player in global politics in 1971, the moment it assumed the veto-wielding permanent seat in the U.N. Security Council previously held by Taiwan. But its growing economic clout over the past decade, combined with the rise of trade sanctions and other economic tools as the preferred instruments of global diplomacy has given China’s economic muscle the power to bolster -- or block -- Western initiatives” (Ghitis, 2012).

China’s growing economy has allowed Beijing to express power in terms of coercion, while foreign aid, investment and humanitarian assistance have helped spread Chinese culture and ideology worldwide. Because economic power is convertible, China is able to achieve political goals through economic pressure. Like the United States, China now has the capacity to intimidate, punish, bribe and seduce others to cooperate with its agenda (Lampton, 2008, p. 38).

China has demonstrated its power equality on several occasions. David Lampton (2008) highlights one example in his book *The Three Faces of Chinese Power: Might, Money and Minds*. Lampton describes the decision of the Clinton Administration in 1993 to threaten Beijing with a suspension of normal tariff treatment unless China improved its human rights record within a year. However, much to the surprise of many in Washington, “China proved tougher than expected, and the Clinton Administration made an embarrassing U-turn as the ultimatum was about to expire” (Lampton, 2008). The negative impact on American “strategic and business concerns” gave China the power to force the United States to compromise on its human rights policy (Lampton, 2008). The United States similarly relies on economic sanctions as the primary pressure point turning to military force as the option of last resort, such as in the cases of Iran, Libya, North Korea and Syria. Because the globalized economy is such a

significant aspect of growth and development, economic coercion is the preferred method of both China and the United States to express power and achieve political ends. However, for the purposes of this article only China will be used to illustrate how economic power translates into political power.

In the spring of 1999, Chinese Premier Zhu Rongji visited the capitol city of Newfoundland to discuss trade and Sino-Canadian relations. The trip was nearly cancelled due to government protests over China's treatment of Tibet. Prior to Zhu's arrival, the capitol city of St. John's flew a Tibetan flag over city hall as a "peaceful sign of protest against China's history with Tibet" (CBC News, 1999). However, Newfoundland's business community successfully persuaded the town to remove the flag in order to avoid a controversy and preserve trade relations. The United Kingdom similarly experienced Beijing's economic power prior to the 2008 Beijing Olympics, when British athletes were issued a gag order by the British Olympic Association in response to criticism of the Communist regime. Competitors who broke the rule were banned from travelling to the games or, if already in China, were required to return to the United Kingdom (Powell, 2008). Critics of the ban argued the United Kingdom was yielding to pressure from the Chinese Communist Party for fear of economic and political backlash. In early 2012, relations between Britain and China were threatened again due to the UK's open support of the Dalai Lama. As a result, Beijing denied or cancelled meetings between high-level officials threatening to disrupt relations. By the start of the London Olympics in July of 2012, however, the United Kingdom reinforced its desire to maintain strong economic and cultural

ties with China. In a statement at China Business Day during the Olympic Games, Foreign Secretary William Hague (2012) declared “as the relationship between our economies grows, Britain can be a springboard for China into European markets, and China’s appetite for British goods and services will only grow”.

A History: US-Sino Relations

Sino-American rapprochement paved the way for China’s economic success. At the time relations began to adapt, at the end of the 1960s and beginning of the 1970s, China was in the midst of the Cultural Revolution. The Cultural Revolution was characterized by the need to purge China and the Chinese people of “old customs, old habits, old culture and old thinking” (Spence, 1999, p. 575). Mao’s assault on traditional Chinese culture caused a torrent of violence, instability and disorder throughout China. However, Chairman Mao and President Nixon both identified mutual interests in securing a cooperative relationship with one another, which was largely based on growing Soviet aggression on China’s northern border. By the end of the 1960s, the Soviet Union had become “the worst threat to China’s border security” (Jian, 2001, p. 240). The military aggressions between the former allies climaxed in March of 1969 when forces collided on Zhenbao Island.

The ideological differences that once divided the two communist powers during Khrushchev’s de-Stalinization campaign and the Cultural Revolution had graduated to the brink of war. Beijing and Moscow accused the other of abandoning Marxism and the proletariat revolution. Beijing specifically “claimed

that capitalism had been restored in the Soviet Union with the emerging dominance of a new privileged bureaucratic capitalist class” (Jian, 2001, p. 242). “All of these changes had provided the much needed ideological space for Beijing to justify rapprochement with the United States” (Jian, 2001, p. 243). Thus, the failure of the Sino-Soviet alliance was the catalyst for Sino-American rapprochement. The relationship to emerge between China and the United States would indeed prove to yield “considerable improvements in China’s strategic position, as well as its international status” (Jian, 2001, p. 239).

Sino-American rapprochement offered China ensured national security against Soviet aggression. Mao theorized that the fear of American military assistance in the face of Soviet hostilities on China’s northern border would deter Moscow from advancements and further military clashes with the PLA. According to Mao’s marshals, the Soviet Union would not dare to invade because of the difficulties it would face regarding doubts about the attitude of the United States (Kissinger, 2011). “In other words, contact with the United States, however much assailed in Chinese media at the moment, was needed for the defense of the country” (Kissinger, 2011, p. 211). Furthermore, Sino-American rapprochement gave China much aspired global recognition. China’s international position improved markedly when Mao allowed China to reenter international diplomacy by way of détente with the United States. This improved status was most evident by the acceptance of the People’s Republic into the United Nations as China’s sole authority. After decades of being denied, the PRC was internationally recognized and Taiwan lost diplomatic privileges as the

government of China, which the Kuomintang government had held since 1949 (Spence, 1999).

The United States had different motives for seeking a cooperative relationship with China, however. As Nixon entered the White house, the United States was fighting an unpopular war in Vietnam that had become viewed as “a congenital moral failure of the American political system” by many of the power players in Washington (Kissinger, 2011, p. 213). Nixon was determined to end the war while simultaneously ensuring that the United States did not appear weak in the face of a troop withdrawal. The Korean War had already challenged the perceived notion within the international community that the United States was unbeatable. Therefore, exiting the Vietnam War was a delicate matter in which the United States could have been painted as weak and vulnerable allowing the Soviet Union to adopt more aggressive policies during the Cold War. The primary objective was, thus, to paint the withdrawal of troops as a matter of national security rather than a retreat. “In this design, China played a key role” (Kissinger, 2011, p. 214).

The two leaders had different reasons for seeking rapprochement with one another. Mao viewed rapprochement as a matter of national security to prevent the Soviets from further engagement on China’s northern border. In contrast, Nixon viewed rapprochement “as an opportunity to redefine the American approach to foreign policy and international leadership” (Kissinger, 2011, p. 214). Formal US-Sino relations were cemented on February 21, 1972 and have been maintained (despite periods of tension and near war) for 40 years. The leaders of

the United States and China, however, had significant hurdles to overcome in order for rapprochement to be successful. The two states had been adversaries both as a matter of policy and popular opinion. China was communist and a champion for the socialist revolution alongside the Soviet Union; whereas, the United States petitioned a moral responsibility to rid the world of communism and institute democracy. Thus, China and the United States were unlikely to develop friendly relations at any time during the Cold War. The two leaders had to improve relations without appearing to compromise their ideals, a very difficult task given the domestic instability in both countries. The United States and China continue to remain dependent on each other to ensure national interests are achieved. While US-Sino rapprochement was based on domestic security and stability, US-Sino relation in the twenty-first century is based on economic and fiscal dependency.

The 21st century brought with it 9/11 and a return to a unilateral and democratic approach to US foreign policy. The Bush administration “left no doubt about America’s commitment to democratic institutions and human rights;” a position that could have very easily tarnished the efforts of President Nixon to reestablish diplomatic dialogue between the United States and China (Kissinger, 2011, p. 491). However, Bush’s policy of engagement actually improved relations (perhaps eased by China’s entry into the war on terror) between Washington and Beijing. Bush’s (2001) campaign rhetoric was in stark contrast characterizing China as a “strategic competitor” to the United States, a position that was later echoed by Defense Secretary Donald Rumsfeld in 2001 after Bush

came to office. Nevertheless, the business and trade dependence of the two powers as the cornerstone of US-Sino relations hastened diplomatic cooperation and engagement. The lack of flexibility in American foreign policy toward China is a matter that both pleases and angers political leaders and the American public alike. The United States and China are heavily dependent on each other economically and financially leaving a small power differential in bilateral relations.

The confidence given to China's leadership by economic progress is demonstrated by the dispute over the manner in which China is influencing the Yuan with respect to foreign currencies and the foreign exchange market (Lampton, 2008). The Chinese Yuan has been relatively unchanged for nearly three years, suspended between 6.83 and 6.32 to the dollar. The disagreement specifically pertains to whether China is purposefully undervaluing the Yuan in order to create an unfair advantage in global trading. Several policy makers and businesses have declared that an undervalued Yuan "gives China an unfair price advantage in international trade, takes jobs away from the United States and adds to global financial distortions" (Reuters, 2010).

The United States contends that China's manipulation of the Yuan is evident by the 'flood of inexpensive goods to the U.S that contributed to the rising trade deficit of \$227 billion in 2009' (Frankel, 2007). As a result, the Obama Administration has urged China to adopt a market-oriented exchange rate that will promote a stronger currency and balanced trade. China argues, however, that the constancy of the Yuan does not demonstrate undervaluation and that "calls for

appreciation are tantamount to protectionism” (Wang, 2010). China further contends that a sudden revaluation of the Yuan will undermine the Chinese economy, destabilize the global economy and damage U.S. businesses. However, China has displayed a willingness to allow the Yuan to gradually appreciate perhaps in an attempt to deter the United States from imposing duties on Chinese imports.

China’s refusal to bow under American pressure to revalue or float the Yuan illustrates Beijing’s growing confidence in the role as a power peer to the United States. CCP leaders have even begun to publically oppose the global policies of the United States, while international institutions have given China greater autonomy to express discord toward American policies without fear of retaliation by the United States. The standards enforced by these institutions have prevented the United States from imposing protectionist measures and sanctions against China to produce a certain outcome. Therefore, Beijing has had the freedom to publically criticize and express concerns over American policies in the Middle East as well as Washington’s handling of the economic recession. According to the Associated Press (2011).

The report recommended "the U.S. government take concrete actions to improve its human rights conditions, check and rectify its acts in the human rights field, and stop the hegemonistic deeds of using human rights issues to interfere in other countries' internal affairs” (Associated Press, 2011). Beijing has similarly condemned America’s sanctions on Syria and Iran, insisting the United States is not the “protector” of the Arab world. China points to U.S. intervention in Iraq as

an example of Washington's hubris and hypocritical motives in caring out humanitarian deeds. In a statement published in People's Daily (2012) and reported by Reuters (2012), Foreign Ministry spokesman Hong Lei stated,

"The United States' motive in parading as a 'protector' of the Arab peoples is not difficult to imagine," it said in a commentary. "The problem is what moral basis does it have for this patronizing and egotistical super-arrogance and self-confidence?"

"Even now, violence continues unabated in Iraq and ordinary people enjoy no security. This alone is enough for us to draw a huge question mark over the sincerity and efficacy of US policy".

The United States can no longer enact policies without considering the impact on relations with China. Even though the United States has more conventional power than China, (in the sense of military prowess, wealth and cultural appeal) Beijing has accrued enough power from conventional resources to influence the decisions and opinions of Washington as well as the American public. The failure of American lawmakers to impose import duties on Chinese goods, in the fall of 2011 in response to speculation that China was manipulating the Yuan, is a primary example of how China's economic growth is impacting the balance of power in US-Sino relations. However, the United States still exerts power toward China. For example, Washington continues to support Taiwan diplomatically and militarily despite warnings from Beijing, the White House greeted the Dali Lama, and imposed sanctions on Syria and Iran in the face of Chinese disapproval in the United Nations Security Council.

Military Power

China's rapid and sustained economic growth has opened the doors to greater military power, what many perceive to be the traditional and even most important measurement of national power. Unprecedented annual growth rates of over 10 percent for the last decade has allowed Beijing to double military spending each year since the end of the Cold War. China "can now afford to underwrite a sustained military modernization program" that has provided Beijing with the "potential to alter the geostrategic and geopolitical landscape in Asia" along with US-Sino relations (Bergsten, Freeman, Lardy, & Mitchell, 2009, p. 197 and 192). The PLA has evolved from an unsophisticated and antiquated force under the leadership of Chairman Mao to a modern military, boasting strategic weaponry and tactical training techniques.

China contends that "an enhanced PLA is an essential component of building comprehensive national power" and to protect against the "uncertainties of the future global security environment and the Taiwan problem" (Bergsten *et al.*, 2009, p. 192). As a result, the PLA has become increasingly capable of projecting power beyond China's borders, as well as producing technologically advanced equipment necessary to improve combat capabilities. "The types of new combat capabilities and supporting technologies that the PLA has been fielding over the past few years have the potential to pose direct challenges to the US military's previously uncontested technological and operational advantages" (Bergsten *et al.*, 2009, p. 198). The threat assessments of China's military

modernization program to the power of the United States, however, have a propensity to be exaggerated.

The capabilities of the People's Liberation Army, although improved, do not yet rival those of the United States. China has made substantial steps in enhancing submarine capabilities, ground-based missiles and troop mobilization, as well as the deployment of China's first aircraft carrier. However, despite periodic showcases of China's military modernization efforts, the PLA still lacks the military projection, sophistication and application techniques that would allow China to compete with the United States. China's military is significantly larger, compared to the United States, with approximately 2.3 million soldiers (Blasko, 2005). Numbers do not necessarily equal power and can even be a disadvantage. A bloated military makes mobilizing forces inefficient and protracted, particularly ground forces, which are necessary to project military force. Furthermore, An oversized military limits the budget for acquiring weapons and investing in research and development, which are the basic elements of a powerful military.

In an attempt to bridge the technology gap with the United States, China relies on Russia and other foreign suppliers for low cost equipment and armaments. These acquisitions are often out of date and difficult to integrate into the Chinese forces. Because, "as in many other militaries of the Third World, deficiencies in Chinese training, doctrine and maintenance for sophisticated arms do not allow for the full exploitation of advanced weapon systems" (Eland, 2003, p. 6). China's reliance on foreign suppliers underscores the weakness of their military capabilities. Developing modern capabilities in national defense

technology is essential if China is to become a powerful military that can change the existing world order. The antiquated technology and training of the People's Liberation Army (PLA) prevents China from rapidly mobilizing troops and projecting military force.

This is not to say that China is not making advancements in technology and research, but merely not at the pace of the United States. The United States spends more than 10 times that of China on acquiring new weaponry and military technologies. The average annual budget the United States spends to invest in weapons procurement and developing and researching new weapons technology is north of \$100 billion (Eland, 2003). China's entire military budget for 2011 was \$20 billion less than this single portion of the U.S. defense budget (The United States Department of Defense, 2010). "A nation's military capital stock-the dollar value of its military hardware-is a measure of modernity" (Eland, 2003, p. 6). Military hardware enables states to deploy and sustain military forces abroad, as well as, influence the behavior of allies and adversaries alike by threat or by force.

China currently lacks the resources to invest in contemporary military hardware that would modernize the PLA to the degree of the United States. For example, as of this writing, China lacks advanced aircraft carriers that would be essential to challenging the existing world order. The possession of operational aircraft carriers is a strong illustration of a state's military modernity, since the technology is limited to nine states. The United States operates twelve large aircraft carriers throughout the world granting the U.S. Navy primacy above every

state (Eland, 2003). China, in contrast, possesses a single 26 year old, ex-Soviet aircraft carrier known as Varyag; a byproduct of the Cold War. Varyag began sea trials in 2011 and was commissioned in 2012. However, the technology of the Varyag has yet to be determined.

China has made three significant strides toward military advancement, however, that have not gone unnoticed by the West. “First, China has created what the Pentagon calls the most active land-based ballistic- and cruise-missile program in the world” (Williamson, 2010, p. 4). The Second Artillery is a specialized corps within the PLA that controls China’s nuclear and conventional missiles. According to reports, China currently possesses over 1,000 highly accurate short-range ballistic missiles with a minimum range of 300 kilometers (Williamson, 2010). While the number of medium range ballistic missiles is unknown, China possesses an intercontinental ballistic missile known as the DF-5 with a range of over 8,000 miles that can reach anywhere in the United States (Washington D.C is less than 7,000 miles from the missile launch site in Beijing). “The PLA currently deploys around 20 to 30 improved Dong Feng-5 missiles, which is China’s primary nuclear deterrent” to aggression from the United States and Taiwan (Sino Defence, 2009). Nevertheless, the United States remains superior with over 450 intercontinental ballistic missiles with an operational range exceeding 8,000 miles (Norris, 2009).

“Second, China has transformed and enlarged its submarine fleet” (Williamson, 2010, p. 4). A large and sophisticated navy permits China to mitigate the power of the United States in the waters surrounding China’s borders,

particularly in the Taiwan Strait. Experts speculate that China's navy possesses numerous high-tech submarines, which are supported by "dozens of older, obsolete types" (Lague, 2008). "By the end of the decade, they say, China will have more submarines than the United States, although it will still lag behind in overall ability" (Lague, 2008). China has demonstrated on various occasions that the PRC military is not to be underestimated and does not intend on threatening the United States. For example, the United States experienced China's growing submarine technology in 2006, when a Chinese Submarine near Okinawa, Japan stalked the U.S. aircraft carrier Kitty Hawk for several days until surfacing within range of a strike. According to officials, "the United States had no idea it was there". The Kitty Hawk incident may have been China's attempt to determine the progress of the military modernization program, or a calculated means to display burgeoning naval power. Regardless, the matter sparked even more anxiety in Washington of a growing Chinese military threat.

"Third, China has concentrated on what it calls informatisation coined in 2002 to describe how the PLA needs to function as once force, using sensors, communications and electronic and cyber-warfare" (Williamson, 2010, p. 4). Due to the lack of technology, the PRC military has been unable to act cohesively. A military is only as powerful as the collective actions of the unit. U.S. military precision is unmatched capable of reaching anywhere in the global in a matter of hours due to advanced communication networks. However, cyber space and information technology has afforded China an opportunity to project power

against the United States. China's cyber power will be discussed in detail later in the chapter.

China's military modernization program has caused significant anxiety not only in the United States, but also among the international community. The improvements have caused many American leaders to question China's objective and motive for pursuing an advanced military with power projection capabilities. Many experts and American lawmakers contend that China is attempting to take over the world and supplant American hegemony; while others, argue that China's desire to develop defense and security resources is a natural progression of economic prosperity. However, it appears "the PLA is building a force that is geared toward impeding or denying" the United States access to the region. Furthermore, "as tension grows over local maritime disputes and U.S. influence in the South China Sea, China's navy is making extended preparations for military combat" (FoxNews.com, 2011). The United States has a significant investment in maintaining access and stability in the Asia-Pacific region for regional allies, to protect American interests and ensure ease in projecting power globally. Therefore, any effort by China, whether benign or adverse, to challenge the regional balance of power sends a sinister message to the United States. Consequently, American lawmakers are concerned that conflict could ensue if the United States seeks to maintain a superior military advantage by building up forces and advanced weaponry capabilities in the region.

Washington has taken steps to ensure the United States remains influential in the region. The United States cannot afford to look weak in the face of

growing Chinese military capabilities, since military power is as much a matter of perception as actual ability. “Military capabilities can be used to destroy, to back up coercive threats, and to provide protection and assistance, which when performed well can alter the behavior of other states” (Beckley, 2011, p. 57). China’s military is considered a threat based on perceived notions, rather than measured capabilities. Not only has the PLA’s capabilities never been tested in real combat, but the lack of transparency calls into question the legitimacy of China’s military advancements. Michael Beckley (2011) argued in *International Security*:

“Indeed, an independent task force of more than thirty experts recently found no evidence to support the notion that China will become a peer military competitor of the United States...The military balance today and for the foreseeable future strongly favors the United States and its allies” (p. 75).

Therefore, overestimating the military abilities and intentions of China can lead Washington to adopt risky policies that seek to preserve power or regional superiority, rather than addressing genuine threats to national interests and homeland security.

The United States has responded to China’s military advances by developing military installations in Australia and reaffirming alliances with Japan, Taiwan and South Korea. President Obama announced plans in November 2011 to reassert the power of the United States in Asia-Pacific by deploying 2,500 American troops to the northwest coast of Australia. Chinese leaders responded to the expansion as a ploy for the United States to encircle and prevent China’s rise. According to Zhu Feng, a professor at Peking University’s School of

International Studies, the United States is “sending a clear cut message to China, that America is back and wants to hold down or roll back China, this will not facilitate diplomatic cooperation” (Ford, 2011).

“The PRC continues to lack the capability to project significant power beyond its borders” (Lampton, 2008, p. 54). China has made significant strides in improving its military force. However, the technological advantage of the United States will allow America to remain superior for the foreseeable future.

Regardless, the PRC has developed enough military power to spark concern in Washington causing the United States to increase its military presence in the region and secure existing alliances. The Pew Research Center released a global report in 2009 that revealed China was viewed as a leading global military power, second only to the United States (Wike, 2012). Consequently, China has attempted to reassure neighbors by “discussing and developing new forums and structures to provide regional security outside the framework of America’s bilateral alliances-structures such as the Six-Party Talks in Northeast Asia”- and was successful (Lampton, 2008, p. 65). As China aims to reassure its neighbors by participating in security forums and drawing the region in economically, Beijing reduces the role of the United States. The United States will continue to have a presence in the region, particularly as a security component. However, the PRC is the economic linchpin of Asia and a vital component of the world economy. Therefore, China will continue to equal the United States in power and influence in world politics, so long as the PRC continues to be an economic giant.

Cyber power

Cyber space and information technology have revolutionized the world and way in which we live. Cyber space and information technology consumes every aspect of politics, as daily operations require the use of digital networks, without which “financial systems would collapse and commerce would slow to a crawl” (Brenner, 2011, p. 42). “Electronic networks are the backbone of our communications, the storehouses of our technology and the nervous system of our economy and government” (Brenner, 2011, p. 9). Colonel Gary D. McAlum, Director of Operations for the Joint Task Force for Global Networks Operations for U.S. Strategic Command in Arlington, Virginia argues, “We are totally dependent on the Internet and the ability to interact across networks causing cyber attacks to be a major menace in the 21st century” (G. McAlum, testimony, May 20, 2008). From healthcare to politics, the world is smaller and more accessible than ever before. Technology and cyber networks allow people to connect all across the globe, money is transferred in split seconds and business is streamlined and has tipped the balance of power in international relations. Digital networks enhance national economic growth, broadcast a soft power, strengthen power projection capabilities and secure domestic borders. “All of these systems could become targets for disruption in wartime or even during lower-grade conflict like a diplomatic standoff” (Brenner, 2011, p. 5).

Information technology is important in international relations, because it allows states to conduct foreign policy more efficiently and has created a new domain to exert power. Information technology “greatly complicates what it

means to be a powerful country in the twenty-first century” (Nye, 2011a, p. 122). Cyberpower is a novel concept developed at the turn of the 21st century to explain and understand the impact of cyber technologies on world politics. The authors of *Cyberpower and National Security* define cyberpower as “the ability to use cyberspace to create advantages and influence events in all the operational environments and across the instruments of power” (p. 314). Dr. Nye (2011a) similarly defines cyberpower as the “ability to obtain preferred outcomes through use of the electronically interconnected information resources of the cyberdomain” (p. 123). Cyber power is “a key lever in the development and execution of national policy, whether it be counterterrorism, economic growth, diplomatic affairs or one of myriad other governmental operations” (National Defense Press and Potomac Books, 2009, p. 39). Therefore, the state with the greatest ability to create, control and protect cyber technologies, as well as the state with the greatest ability to disrupt cyber technologies, maintains a significant advantage in world politics.

When determining which state is more powerful than another, people tend to compare military capabilities. The states with the largest and most technologically advanced militaries have traditionally possessed the most power in international relations. However, “in projecting the future, the National Intelligence Council argues that the utility of military forces is declining in the twenty-first century” (Nye, 2011a, p. 29). Before economic globalization and information technology, military power was the only means to assert power and political scientists have relied heavily on military forces to measure power

projection capabilities. However, cyber power and economic globalization have diminished the utility of the military in projecting power. Prior to the economic and technological revolution of the twentieth century, states were required to mobilize large armies and aircraft carriers to intimidate others and implement policy by means of force. Now, economic globalization and information technology allows states to project power without a military. Military power is no longer a viable resource for achieving foreign policy goals (Everts, 2002). According to Everts (2002), "Military power has become less important, because it is often ill-suited to solve the complex political and security problems we face" (para. 2). Cyber attacks are faster, easier and more damaging than conventional military force. "The Chinese recognize that cyberspace can be a war-fighting domain and that cyber power now ranks with land, sea, and air power in terms of military strength, victory or defeat" (Spade, 2012, p. 2). Therefore, focusing on China's military capabilities as a measurement of power instead of its cyber capabilities is shortsighted.

The United States Department of Defense ("DoD") currently considers China to be one of the greatest cyber threats to the national security of the United States. During a subcommittee hearing in April 2012, Congressman Michael McCaul declared, "China's cyber warfare capabilities and the espionage campaigns they have undertaken are the most prevalent of any nation state actor" (Newsmax, 2012). The DoD also reported in 2012 that China was becoming more aggressive and proficient in controlling and disrupting foreign networks and cyber technologies, specifically targeting the United States. China has stolen

intelligence from the United States military, government and private sector, jeopardizing the security of the United States and “the technology that creates jobs, wealth and power” (Brenner, 2011, p. 54). In August 2006, China penetrated the networks of the United States DoD and downloaded 10 to 20 terabytes of data compromising the national security of the United States (Center for Strategic International Studies, 2012, number 2). The operating and guidance system of the F-35 fighter jet used by the United States military in stealth operations along with the Air Force’s air-traffic control systems were penetrated in 2009. In a study released in May of 2012 by Cambridge University, researchers found evidence that a Chinese manufacturer inserted a backdoor access point in silicon chips used by the United States military. Cambridge University researcher, Sergei Skorobogatov (2012), explains: “This particular chip is prevalent in many (U.S.) systems from weapons and nuclear power plants to public transport. In other words, this backdoor access could be turned into an advanced Stuxnet weapon to attack potentially millions of U.S. systems”.

The United States fends off attacks from China on a daily basis. According to the United States Government Accountability Office (2012), since 2006 “the number of incidents (unintentional and intentional threats) reported by federal agencies to the federal information security incident center has increased by nearly 680 percent” (United States Government Accountability Office, 2012). Likewise, China has penetrated the networks of several American companies that lead the world in technology, science and research. According to Bloomberg News, “the networks of at least 760 companies, research universities, Internet

service providers and government agencies were hit over the last decade by the same elite group of China-based cyber spies” (Riley & Walcott, 2011). China attacks the networks of American government agencies and companies to steal intellectual property have significant implications for the safety of American economic power and national security. China has also been linked to threats against U.S. critical infrastructures such as power grids, gas pipelines and petrochemical refineries. In December of 2009 The New York Times reported, “Chinese researchers at the Institute of Systems Engineering of Dalian University of Technology published a paper on how to attack a small U.S. power grid sub-network in a way that would cause a cascading failure of the entire U.S.” The study published in the journal *Safety Science* was entitled *Cascade Based Attack Vulnerability on the US Power Grid* and immediately alarmed Washington.

China understands the strategic advantage of the United States in global affairs relies heavily on technological and economic superiority. “Our science, technology and ability to rapidly turn ideas to commercial use are what generate our wealth, fund our defense and make us powerful” (Brenner, 2011, p. 62). In the majority of cases, China has launched cyber intrusions to recover data and valuable intelligence about network vulnerabilities, a practice coined as cyber espionage. However, “the time it takes in some cases to go from collecting data and mining data to being disruptive, either accidentally or on purpose, can be very short so therein lies some of the concerns from a DoD perspective, the insignificant amount of time that it takes to very quickly switch from passive to disruptive, if desired” (G. McAlum, testimony, May 20, 2008). The information

China has accrued through cyber espionage may seem benign in the cases of Google, the Marriott Hotel and Yahoo, Inc., but defense contractors and government agencies use the same public network. The national security of the United States depends not only on producing but also protecting military technology and secrets.

The theft of military and defense secrets as well as intelligence on American businesses is severe, but the power China gains from extorting stolen information creates a significant advantage in US-Sino relations as well as world politics. Worst-case scenario, China takes control over any portion of the United State's military or critical infrastructures, including energy, transit, oil refineries or communication networks, holding it hostage to achieve political objectives. Although China is unlikely to initiate a digital hostile takeover of the United States' critical infrastructure, Beijing is likely to respond to American aggression over Taiwan or the South China Sea with an assault or seizure of military and energy networks. According to a report prepared by Northrop Grumman (2012) for the U.S.-China Economic and Security Review Commission:

“As Chinese capabilities in joint operations and information warfare strengthen, the ability to employ them effectively as either deterrence tools or true offensive weapons capable of degrading the military capabilities of technologically advanced nations or hold these nations' critical infrastructure at risk, in ways heretofore not possible for China, will present U.S. leaders and the leaders of allied nations with a more complex risk calculus when evaluating decisions to intervene in Chinese initiated conflicts such as aggression against Taiwan or other nations in the Western Pacific region” (p. 9).

The consequences of a cyber attack on energy networks have the most immediate and far-reaching injury to the United States, as evident by the

Northeastern Blackout of 2003 and aftermath of Hurricane Sandy in New York City. In August of 2003, eight states throughout the Midwest and Northeast suffered from widespread power failures due to a software bug. The bug caused a malfunction in the alarm system designed to notify operators of a system failure, which then caused a sequence of reactions that led to a power outage. Officials estimated that millions of people were affected from Canada to New York. The lack of power generated rampant panic as citizens suffered from heat exhaustion, water contamination, sewage backup, prolonged medical care, lack of transportation and no communication services. Gasoline was unavailable or in limited supplies, tolls failed and traffic lights were not working, leading to large lines and gridlock. Following Hurricane Sandy, New Yorkers turned to dumpsters and looting to satisfy their hunger, and the impact on the economy was monumental. Hurricane Sandy “may cut output in the world’s largest economy by \$25 billion in the fourth quarter, according to Gregory Daco, a U.S. economist at IHS Global Insight” (Kearns, 2012).

Experts agree that “Chinese capabilities in computer network operations have advanced sufficiently to pose a genuine risk” to the United States, particularly in the event of a conflict; and currently, the United States is ill prepared to thwart an intrusion (Northrop Grumman Corp, 2012, p. 10).

According to Remarks on the Department of Defense Cyber Strategy, “it is hard to know how much damage this digital thievery does to our economic competitiveness and national security, a recent estimate pegged cumulative economic losses at over a trillion dollars” (W. Lynn, speech, July 14, 2011).

China may not have the military strength or cultural appeal of the United States, but their ability to threaten cyber networks and software has the potential to cripple the global power of the United States, if only temporarily.

CHAPTER 3

FROM RISING POWER TO PEER POWER

China has emerged as a power peer to the United States. Due to economic globalization and information technology, Beijing's influence in designing and achieving its goals in world politics has increased. China's influence has increased within each dimension of power: economic, hard, soft and cyber. "China finally has attained the equality it has sought since the mid-nineteenth century" (Lampton, 2008, p. 265). However, China is still not considered a superpower according to most experts and leaders, which look to a powerful and advanced military as the foundation of a superpower. The United States (and at one time the former Soviet Union) is considered a superpower due to its comprehensive strength in conventional power resources—a strong and technologically advanced military, the largest economy and most appealing culture. However, experts continue to rely on Cold War power indicators without fully acknowledging the scope and impact of the global economy and information technologies on power in twenty-first century world politics.

Power during the Cold War was measured largely by military and nuclear capabilities. The United States and Soviet Union were the only states that possessed the type of military power to be deemed superpowers. In an article

published in 1980 during the height of the Cold War, Dr. Thomas R. Maddux (1980) highlighted military power as the variable that demonstrates the Soviet Union's superpower status. According to Maddux (1980):

“Since 1975 the Soviet Union has demonstrated its superpower status in ways that have caused alarm in the United States. The continuing buildup of Soviet naval and air forces, ground forces in Europe, and strategic nuclear weapons has reactivated concern about Moscow's intentions. The Kremlin's expansion of its influence through military advisers, arms, and friendship treaties that frequently contain a mutual security provision has been even more disturbing” (para. 1).

However, in an era of economic interconnectivity and digital dependency, military force is an antiquated means to measure power and conduct relations. China has successfully leverage economic and cyber coercion to express power and achieve political ends without a strong military to support its threats.

Unlike during the Cold War when dominating power was defined and achieved by military prowess, economic globalization and cyber technologies have encouraged cooperation and equalized power. No two states understand this paradox more than the United States and China. Beijing and Washington are forced to cooperate and reevaluate their political calculations upon threats of economic injury or cyber warfare, which limits the ability to define and achieve desired outcomes. Although trade did occur throughout the Cold War, the scope and magnitude of a globalized economy has altered the dynamics of power relations. The world is no longer partitioned into the Western sphere of influence and the Soviet bloc, but rather is a globalized world that knows no boundaries. Contrary to the United States and Soviet Union, the economic growth and stability of China and the United States are too easily impacted by the failure to

cooperate. Further, cyber space has reduced the utility of military force to project power. Information and cyber technologies allow China to project power more cheaply and easily than during the Cold War. In the virtual world, physical distance is immaterial and a single virtual offense is almost cost free (Nye, 2011a). Therefore, China is able to pose a security threat to the United States even though its military is not capable of projecting power globally.

The United States no longer dominates world politics, but to the delight of many in Washington neither does China. The power and influence of the Middle Kingdom among members of the international community is growing. “Even a resurgent United States could not exercise power and dominance over a rising China. China is already able to do what the rest of the world does not want it to do” (Subramanian, 2011). This is not to say that world politics is without leadership. China and the United States are the two most powerful states in the international community due to their large economies, cyber capabilities and position on the UN Security Council. As a result, world politics is US-Sino centric, rather than hegemonic, and Beijing has begun to demonstrate more assertiveness in U.S.-Sino relations.

In mid-2011, Beijing “warned that the emergency debt bill thrashed out between Democrats and Republicans failed to defuse Washington’s debt bomb for good, only delaying an immediate detonation by making the fuse an inch longer” (Piper, 2011). China’s criticism came following the decision of Standard & Poor to downgrade the United States credit rating and Washington remaining reluctant to enact real policies that would reduce the deficit. According to top CCP

officials, as reported by Xinhua News Agency:

“The downgrade by S & P could be followed by further devastating risk and global financial turmoil if the U.S. does not learn to live within its means. China, the largest creditor of the only great power in the world, has every right to ask the U.S. to address their structural problems of debt and ensure the safety of Chinese assets in dollars” (The China Times, 2011).

The United States continues to hold an arsenal of power resources, which enables it to advance policies and preferences despite Beijing. For example, US arms sales to Taiwan and the White House reception of the Dali Lama continue to be points of contention between the two states even though others have perished under Chinese pressure over these issues. France and Mongolia are notable examples of China forcing a foreign interlocutor to change its policies (Lampton, 2008). Lampton (2008) explains:

“In 1992, Beijing did not permit French firms to bid on Guangzhou subway contracts in retaliation for Paris’s decision to sell Mirage jet fighters to Taiwan”. And again “in November 2002, when the Dalai Lama visited Mongolia, China suspended rail services between the two countries for two days, a none-too-subtle reminder of Beijing’s ability to control Mongolia’s chief trade route” (p. 67).

China equally defies the United States; by continuing to court what Washington considers rouge regimes and violate international human rights laws despite repeated objections from the United States. As competition over China’s growing market and appetite for procuring foreign goods increases, Beijing will gain more control in defining and achieving its domestic and international agendas. Even though China’s power largely remains economic, “economic power is convertible, providing the wherewithal for the development” of military power, information technology and cyber power that endorses power equality with the United States

(Lampton, 2008).

The variables used to measure power are fixed in the Cold War, and as a result, China's power and influence in world politics is greatly underestimated. Unlike during the Cold War in which power rested heavily on military force and coercion, power in the twenty-first century rests heavily on economic and cyber coercion. Economic interconnectivity and cyber space has minimized the role of military power in influencing political calculations and achieving preferred outcomes. Firepower and nuclear weapons were the currency of the Cold War, whereas economic leverage and cyber threats are the power currencies of the twenty-first century. States now fear economic and cyber Armageddon more so than nuclear Armageddon and are willing to buckle under the pressure of the United States or China in order to avert a catastrophe. As a result, China has gained the level of global respect and power once only prescribed to the United States. However, China's political structure and domestic priorities hinder its ability to sustain its current power trajectory. As China's standard of living increases due to economic development, people will demand higher paying jobs, which will damage China's comparative advantage centered on low-wage labor. The following chapter will discuss in detail China's constraints.

CHAPTER 4

CHINA'S CONSTRAINTS

Without a strong understanding of China's political structure and domestic priorities, the fear the world will become Sino-centric is misguided. China's power peer position in world politics is a direct result of economic globalization and information technology that have provided Beijing the wherewithal to project power globally. However, the heavy reliance on foreign technology and investment leaves the country's "future viability deeply in doubt" (Pei, 2009). This chapter examines how China's innovation gap, reliance on foreign exports and technology, and unstable economic growth are the byproducts of a communist system.

Political Structure

Innovation

The Communist Party curtails individual freedoms and expressions in order to protect power. As a result, China lacks the innovation to develop and protect competitive technologies, and is thus, forced to rely on exports and foreign technology to sustain current economic growth rates. Communism restricts freedom of expression and business development, which in turn retards economic

growth, military development, education and technology and cyber advancement. Through freedom of expression, innovation and imagination are allowed to cultivate into new technologies, research and concepts that translate into economic growth and new technologies.

According to the 2012 World Freedom Report released by Freedom House, “China maintains the world’s most sophisticated and comprehensive system of authoritarian political control” (p. 2). Listed as “not free”, China was given a combined freedom score of 6.5 out of 7. The report later stated:

“China received a downward trend arrow due to increased Communist Party efforts to restrict public discussion of political, legal, and human rights issues, including through the systematic disappearance of dozens of leading social-media activists and lawyers and growing online censorship among domestic social-networking services” (p. 22).

The objective behind social control, as with economic growth, is to ensure the continued rule of the Communist Party. The recent economic decline is potentially the spark that could launch the CCP into a paranoid frenzy resulting in a cessation of even more individual freedoms and deactivation of the Internet similar to the aftermath of the Tiananmen Square Crisis. A strong economy needs free thinking entrepreneurs and solid protection of intellectual property (Nye, 2011a). Instead, China consists of stifling state-interferences, weak and contradictory laws (Nye, 2011a). Rather than producing a political system that would allow China to become a long-term destination for foreign investment, China remains the manufacturer of low-end products.

China surpassed the United States in 2003 to become the world’s top destination for foreign direct investment annually. As of 2005, China has

received a cumulative total of \$618 billion in foreign direct investment (Morrison, 2006). According to recent reports, foreign funded enterprises account for 80 percent of total exports and 60 percent of GDP (Jacques, 2009). By comparison, “U.S. FDI totaled \$194 billion in 2010” alone (Economics and Statistics Administration, 2011). China’s dependence on foreign funded enterprises, however, is even more overt in advanced and high-tech industries such as computers, electronics and telecommunications. According to the United States Trade Representative (2012), the United States was the largest destination of Chinese imports in 2010. “Goods imported from China totaled \$365 billion in 2010, a 23.1 % increase (\$68.6 billion) from 2009, and up 841% over the last 16 years. U.S. imports from China accounted for 19.1% of overall U.S. imports in 2010” (The Office of the United States Trade Representative, 2012). China’s dependence on American’s consumption of Chinese goods increased nearly 10 percent in 2011, illustrating that China’s dependence continues unabated.

Leaders in Beijing are taking the necessary measures to become globally competitive in science and technology industries within the next ten years. In 2006, the CCP instituted policies to increase China’s scientific contributions and improve technological advancements that include investments in science, research and education. The program is intended to “reduce its degree of dependence on technology from other countries by 30 percent or less” by 2020 (Segal, 2010). “China’s spending on research and development has risen at an annual rate of 19 percent since 1995, reaching \$30 billion by 2005” (The New York Times, 2007). In addition, the number of patent applications in China has more than doubled to

194,579, and the number of researchers and scientists are on the rise (The World Bank, 2010). China “is now producing over 900,000 science, engineering and managerial graduates every year,” more annually than the United States (Jacques, 2009, p.). Even though “the Communist Party has relinquished its totalitarian controls over social life and allowed a multitude of politically innocuous safety valves for letting off steam” in order to promote innovation, activities that pose a threat to the party, no matter how benign, are prohibited and often punished (Shirk, 2007, p. 67). By limiting individual freedoms, the CCP is preventing China from exercising the innovation and creativity they are seeking. Fostering an innovative and creative society is futile without an outlet in which to exercise it.

Despite improvements to its innovation capacity, China’ research and science industries are not globally competitive. Because researchers and scientists prioritize publications over scientific findings, China’s science and technology industries are plagued with fraud. “Plagiarism and corruption are rampant and probably getting worse. In December of 2010, two university researchers were found to have faked data in 70 papers published in 2007. Incredibly, the pair received wide support across China as many argued that the country’s bureaucratic educational system encourages the forgery of data and the production of low-quality publications. Such a system, it is safe to say, does not promote scientific breakthroughs” (The Editors, 2010). “The pressure for visible outcomes encourages academic fraud and corruption” (Cong, 2004).

Moreover, “much of the development has been built on a massive infusion of foreign capital and FDI- embodied technology” (Cong, 2004). Over 40 percent (\$29.1 billion) of U.S. exports to China in 2010 were the parts and accessories for the manufacturing of advanced technologies such as nuclear reactors, electrical machinery, television recorders, aircrafts, automobiles and surgical instruments (United States International Trade Commission, 2010). Likewise, the market share of China’s advanced technology imports has increased over the past decade from 41.1 percent in 2000 to 45.7 percent in 2009, of which are predominately circuits and electronic components (World Trade Organization, 2010). In 2009, 45 percent of China’s total merchandise imports were components for integrated circuits and electronics (World Trade Organization, 2010). The increase in advanced technology imports indicates that China’s innovation capacity continues to suffer, if not decline. In order to compete with Western innovation, China needs to develop a political system for science and technology to prosper.

China has designed programs to promote advanced technology industries in clean energy, information technology and nuclear physics, despite political impediments to innovation. The Boston Globe (2012) reported China had “approved plans to launch 20 major projects for emerging industries” in order to “help the economy while it faces increasing downward pressure”. Furthermore, China has transformed the PLA from a backward army comprised of farmers into a modern twenty-first century military. Specifically, the PLA has made significant improvements in their naval capacity. Even though the United States military remains superior, China is demonstrating a gradual maturation in military

technology. However, the political structure of the People's Republic of China continues to impede progress.

The United States attracts technology and innovation industries due to an appealing political system that encourages creativity and protects intellectual property. According to testimony before the House Committee on Foreign Affairs by Phillip Levy:

“The vibrant and innovative U.S. technology industry has benefited from federal support for basic research, from independent and successful research universities, from a community of scholars and researchers drawn from around the world, from strong intellectual property protections, and from a competitive market environment that allows entrepreneurs to emerge and thrive. This is the antithesis of an approach that stifles the competitive environment, names national champions, and at least tacitly condones intellectual property theft. The environment that China is creating is unlikely to attract top research talent from around the world, for example, since such innovators generally value their intellectual freedom and independence. The weak protections for intellectual property will offer few incentives even for Chinese firms to invest heavily in risky new ventures” (p. 3).

Cong Cao (2004b) in an article for *Asian Survey* concluded:

“The lack of institutional support for innovation and the indigenous technological capabilities necessary to be competitive, unclear ownership, lack of venture capital, and the overwhelming role of government have impeded the efforts of China's high-tech parks to duplicate the success of role models such as Silicon Valley” (abstract).

In order for China to succeed in maintaining global power, more must be done to reform its existing political system and engender innovation.

China's political structure is the most significant variable that undermines technological progress while engendering dependence on the West. China's one-party state cannot generate world-class scientist, researchers, technology and engineers. According to Susan Shirk, China remains “more than 100 years behind

developed countries like the United States in economic modernization” (Shirk, 2007, p. 17). Like the United States, “China is an increasingly modern society, perhaps the world’s most dynamic nation. Yet, its government remains largely unreformed” causing important impediments to scientific advancements (The Editors, 2010). China is a creative culture, but the inability to exercise creativity freely weakens China’s development of an innovative society. Although China is now attempting to move away “from a model of made in China to one of innovated in China”, the country continues to rely on foreign funded enterprises to procure new technologies (Segal, 2010). So long as China continues to curtail individual freedoms and expression, Beijing will be unable to wield power internationally.

It’s not about the economy; it’s about the economy

China’s economic development has evolved substantially since U.S-Sino rapprochement in 1972 to include notable market reforms that lend more to capitalism than communism. China’s semi-market economy combines capitalism with state-owned enterprises. The Chinese economy has been coined as socialism with Chinese characteristics. According to a press release issued in 2007 by the Chinese Communist Party, socialism with Chinese characteristics is explained as:

“Something that combines the basic principles of scientific socialism with the facts of building socialism unique to China. Socialism is the common rule and essential feature of the practice, while Chinese characteristics are what the basic principles of socialism really embody in China” (Chinese Communist Party, 2007).

Despite diplomatic and economic reforms, China’s “number one priority will always be the preservation of Community Party rule,” all other issues,

concerns and problems are secondary (Shirk, 2007, p. 8). The CCP contends that maintaining high levels of economic growth (as well as curbing individual freedoms) is the key to protecting party power. China's leaders theorize that large economic growth, which brings copious employment, will maintain social stability. According to Susan Shirk (2007), "By sustaining high rates of economic growth, China's leaders create new jobs and limit the number of unemployed workers who might go to the barricades" in protest of Communist Party rule (p. 68). Therefore, policy decisions are determined by the risks and benefits to economic growth. However, even though China is by all standards an economic power with unprecedented growth rates, and the largest exporter of goods in the world with nearly \$2 trillion in exports annually (in a nation-state comparison); China's authoritarian regime rewards economic inefficiency while fostering crony capitalism.

"Because of the party's fixation with high growth, government officials are rewarded for delivering, or appearing to deliver, precisely that" (Pei, 2006). China's landscape is littered with "image projects", such as vacant real estate developments, which are burdening the economy and the national banking industry. "China's banking system, which costs Beijing about 30 percent of annual GDP in bailouts, is saddled with nonperforming loans and is probably the most fragile in Asia" (Pei, 2006). As a result, China's banks are showing the same cracks that precipitated the economic recession in the United States during 2007. These variables, along with reports from May 2012 that China's growth is losing steam, indicate that China's economy is not the "indestructible juggernaut"

that will safeguard the Communist Party (Harding, 2010). “Had the Chinese economy been more balanced between domestic demand and exports and between household consumption and investment, monetary tightening and falling exports would not have had such dampening effects on growth” (Pei, 2012). As new reports indicate China’s economy is in fact slowing, fears that a domestic uprising is likely to regain traction. But because the CCP feared losing power, leaders opted for short-term stability rather than long-term sustainable development. Therefore as economic growth shrinks, China’s global power is likely to decline gradually. In order for China to achieve its goals of scientific breakthroughs, innovation and technological advancements, the CCP will need to adjust China’s political structure and curb domestic priorities focused on retaining power.

CHAPTER 5

MOVING FORWARD

China's rise as a power peer to the United States has upset the American led world order. The United States has dominated world politics since the collapse of the Soviet Union in 1991, and the change to the status quo has alarmed American politicians and leaders. "China's development has raised concerns about the implications for America's economic health, security and global political influence. Many Americans are not confident that China's strategic interests are still compatible with those of the United States," and argue whether China will act as a responsible power or emerge as a threatening adversary (Independent Task Force, 2007). A shift in power does not mean the United States is in decline, merely, that Washington no longer possesses the ability to make China act in a particular way. Given China's growing role in world affairs, Washington needs to exercise greater caution in international and bilateral relations to avoid inflaming Beijing, which could ultimately harm American interests. China's newfound power has significant political and policy implications for the United States. With a rapidly expanding economy, modernizing military and growing cyber sophistication, leaders in Washington need to pursue a policy of engagement rather than confrontation.

The uncertainty surrounding whether China will surpass American economic supremacy, launch a military challenge or threaten digital networks can lead to reckless policy decisions and diplomacy. Governor Mitt Romney's 2012 Presidential campaign pledge to label China as a currency manipulator has severe repercussions not only for U.S.-Sino relations, but also for American consumers and businesses by inciting a trade war. The Obama Administration's recent decision to impose tariffs on Chinese solar products has similar effects. "Slapping tariffs on the Chinese may make for good politics, but it will slow solar adoption and almost undoubtedly provoke retaliatory trade actions by a country with which the U.S., like it or not, is inextricably linked" (The Editors, 2012). A deeper understanding of Beijing's principles and political priorities reveal that China is not a threat to the power of the United States as many speculate. Rather than emphasizing the perils to U.S. supremacy brought on by a rising China, the United States needs to focus on "building a close, candid, and cooperative relationship with China in order to advance common interests and constructively address differences" (Independent Task Force, 2007). The relationship between the United States and China has been characterized by periods of tension and cooperation. Understanding the history of U.S.-Sino relations is important in order to avoid the pitfalls that have resulted in tension between the two states.

What a Power Peer Relationship Means for the United States

Economic Implications

China's rapid economic growth has been at the forefront of arguments by

political and business leaders, pundits and analysts as the cause for American decline. By relying on low-value added manufacturing and constrained by Communism, China is decades behind the United States in economic development. The United States economy is over 200 percent larger than that of China, and with greater stability and diversity. The United States is the epicenter of technological innovation, science and research. China's economic success has benefitted the United States through cheap consumer products, significant lending opportunities, and an increase in exports of American services and goods. However, these benefits have come at the cost of many of millions of American manufacturing job.

“The Economic Policy Institute estimates that America lost 2.7 million jobs as a result of the U.S.-China trade deficit between 2001 and 2011, 2.1 million of them in manufacturing” (Kurtzleben, 2012). China may be the primary culprit for why the United States has fewer manufacturing jobs; however, jobs are being outsourced to places all around the world. China is simply the preferred destination of global companies seeking cheap labor, a competitive market and few environmental regulations.

The Wall Street Journal (2012) reported:

“Railing against imported Chinese goods is especially shortsighted given that so many of America's own exports are components for the products the United States eventually imports again. And don't forget the transportation, retailing, marketing and other jobs that are dependent on those Chinese goods”.

Despite the loss of jobs, free and open trade with China is a principal component of American economic growth and prosperity, helping to make the United States

powerful.

Washington needs to focus on securing America's strategic advantage in advanced technology, research and development and high-value added industries. China's strength of high growth rates and manufacturing is also its weakness. China's economic growth is based on low-end technology; borrowed engineering and low-value added manufacturing that make China's economic power superficial. China can and will be easily replaced by other developing and emerging economies as the world's workshop as China's standard of living increases. And because the ideological restraints of Communism limit technology and science, the engine of economic growth will slow and the CCP will concentrate even more on controlling the spread of nationalism and protests movements. Therefore, Washington needs to continue to cooperate and build a collaborative relationship with China in order to preserve trade relations that are vital to the American economy.

Military and Security Implications

Military Conflict

China's economic power has been converted to military power, which significantly complicates United States foreign policy. In the last decade, the People's Liberation Army has made significant advances in naval technology and weaponry procurement. This year the PLA has experienced improvements in their space program and aircraft carrier development. The infantry is sleeker and more mobile, and the Chinese navy has become one of the most advanced in the world. Nevertheless, the United States continues to maintain the world's most

dominating and sophisticated military. In all aspects, the United States exceeds the PLA in technology, research and sophistication. Yet, many remain concerned that China and the United States will go to war. Theorists argue that in periods of power transition war is likely to occur between the existing power and rising power. “History teaches us that rising powers are likely to provoke war. The ancient historian Thucydides identified the fear that a rising Athens inspired in other states as the cause of the Peloponnesian War” (Shirk, 2007, p. 10). Essentially, the United States will seek to prevent China from gaining power as China attempts to expand its power, culminating in a military clash.

Military confrontation between the United States and China is highly unlikely despite contentions that conflict is looming. A military confrontation contradicts China’s path toward rapid and sustainable economic growth, which the CCP relies on to retain power and prove legitimacy in a fragile nation. Therefore, Beijing is unlikely to pursue policies that jeopardize economic growth. China’s political philosophy, borrowed from *The Art of War*, is to avoid war when possible. Sun Tzu advocates that while war may be necessary, swift action should be taken to prevent economic losses. Military conflicts drain the financial resources of a country as seen from the two U.S. wars in Iraq and Afghanistan. The United States has spent an estimated \$3.7 trillion as of 2011 to fight the War on Terror in the Middle East (Trotta, 2011). Because Beijing is consumed with achieving high economic growth rates, China is likely to avoid policies that would endanger or cause economic losses. Furthermore, China is unlikely to engage in a protracted military confrontation with the United States, unless Beijing is

confident in swift military defeat.

Chinese leaders have appealed to Washington through Sun Tzu in an effort to convince Americans China is a peer and not a threatening adversary. “In 2006 President Hu Jintao gave President George Bush silk copies of the *Art of War* in English and Chinese. Jia Qinglin, the fourth-ranking member of the party's supreme body, the Politburo Standing Committee, said in 2009 that Sun Tzu should be used to promote lasting peace and common prosperity. In July this year (2011), Beijing's Renmin University presented an *Art of War* to Admiral Michael Mullen, the chairman of America's joint chiefs of staff, during a visit to the capital” (The Economist, 2011). However, the message is clouded by a rapidly modernizing military and reports from the Pentagon that China is preparing to fight short, intense conflicts. Any conflict with the United States is unlikely to be short and intense, but nevertheless, Washington is hedging against China's military modernization.

In the fall of 2011, President Obama deployed a Marine task force of up to 2,500 soldiers to the northern coast of Australia. In a speech to Australia's Parliament last November, President Obama pledged to “preserve our unique ability to project power” (Kuhn, 2012). China remains significantly behind the United States in military capacity and strength; yet, Washington is demonstrating intent to balance against China's growing military force. China's political structure, domestic priorities and philosophy will prevent the PLA from becoming a military threat to the United States in the near future. As economic growth and prosperity decline due to the constraints of communism, China's military

modernization program will also decline. However, “China does not need to surpass the United States, or even catch up with the United States, in order to complicate U.S. defense planning or influence U.S. decision-making in the event of a crisis in the Taiwan Strait or elsewhere” (Independent Task Force, 2007). “Even assuming the most benign intentions on the part of Beijing, a more capable PLA that can sustain force in the Asia-Pacific region, coupled with China’s economic traction, has the potential to significantly alter the geostrategic and geopolitical landscape in Asia for the first time since the end of the Second World War” (Bergsten *et al.*, 2009).

The developments to China’s military have clear ramifications for the United States. The presence of American armed forces, as well as allies in the region, will clash more often with PLA forces as China gains confidence in their military abilities. Preserving American military presence in the South Pacific balances against Chinese naval patrols and protects American trade routes. Therefore, the United States needs to continue maintaining a strong military and diplomatic presence in the South Pacific to protect interests and alliances.

Cyber Vulnerabilities

China is considered the greatest cyber threat to the United States. On a daily basis, hackers originating in China penetrate U.S. networks and compromise national security and economic competitiveness. “According to press reports, a classified FBI account states that the PLA of China has developed a cadre of 30,000 cyber spies, who are supplemented by more than 150,000 private sector cyber experts whose mission is to steal American military and technological

secrets and cause mischief in government and financial services” (Brenner, 2011, p. 52). According to Congressional testimony by Dr. James Mulvenon of the Advanced Studies and Analysis Defense Group in Washington, D.C. during 2008, China is in the process of training 50,000 more military hackers to exploit weaknesses in computer networks primarily in the United States (J.P. Mulvenon, interview, May 20, 2008). China has infiltrated the networks of the Pentagon, State Department and Lockheed Martin stealing valuable intelligence on U.S. military operations, and the technology for reverse engineering and production of military equipment.

Cyber security breaches jeopardize the technological and scientific developments that give the United States military power and an economic advantage. As the role of information technology for weapons systems, financial systems, communications systems and surveillance technologies increases, the vulnerability of the United States also increases. President Obama (2011) declared in a report:

“The world must collectively recognize the challenges posed by malevolent actors’ entry into cyberspace, and update and strengthen national and international policies accordingly. Activities undertaken in cyberspace have consequences for our lives in physical space, and (the United States) must work towards building the rule of law, to prevent the risks of logging on from outweighing its benefits”.

Therefore, Washington needs to strengthen cyber security regulations that would require American businesses to secure data and computer networks. Private industries are currently not required to improve cyber-security, and as a result, have failed to protect valuable information that is a critical component of national

security and economic growth. Many business and political leaders argue that government intrusion would increase the cost of business and subsequently hurt the economy. However, failing to implement cyber-security measures is both economically and publically damaging. “Cybercrime now costs a U.S. business \$8.9 million per year, an increase of 6% from 2011 and 38% from 2010” (Schwartz, 2012). Cyber crime impacts a company’s image and may result in high priced goods for consumers. In contrast, “businesses that employed security intelligence tools lowered their cybercrime costs by an average of \$1.6 million per year, in part by being able to spot and respond to breaches more quickly” (Schwartz, 2012).

The United States and American businesses can no longer afford to neglect cyber-security regulations. The failure of the private sector to proactively implement cyber reform jeopardizes U.S. strategic advantages. The United States economy and global power depend on the growth, development and innovations of American businesses, which are vulnerable to theft if cyber security reform is not adopted. Furthermore, the manufacturing and production of communication and information technology equipment should be limited to the United States. Economic globalization has given China access to tamper with and steal technology during the manufacturing of American goods. China manufacturers an American designed military chip known as the PA3 used in weapons, guidance systems, public transportation, utilities and automobile products. A Cambridge researcher, Sergei Skorobogatov, discovered a backdoor built into the chip. “Basically, Chinese cyber spies can gain use of the chip’s built-in malware to

decipher military pass codes and gain remote access to the chip and reprogram it to do their bidding; permitting a new and disturbing possibility of a large-scale Stuxnet-type attacks via a network or the Internet on the silicon itself” (Reed, 2012). The risks to national security by allowing China to manufacture critical military and infrastructure components are unnecessary.

The United States is hedging against China’s increasing power; however, Washington needs to be attentive to a self-fulfilling prophecy. China is not the reincarnation of the former Soviet Union. Beijing’s focus is economic growth. A rising China need not alarm the United States as Washington and Beijing have more to gain from a cooperative partnership than a cold relationship. China and the United States are valuable allies and partners in international relations in the pursuit of international peace, nuclear nonproliferation, clean and renewable energy, and environmental protection. However, Washington must continue to protect the interests of the United States, but in a manner that does not jeopardize US-Sino relations or alienate the international community. Touting the decline of America relative to China is premature and leads to reckless political behavior that seeks to prevent a loss of power. As the world becomes more economically interdependent and linked by information technology, the United States cannot rely on realism alone to set the foreign policy agenda. Rather, the United States must adopt a policy of “smart power”, a term coined by Joseph Nye, that strengthens relations.

The United States and China have more to gain from engaging in a collaborative leadership of the global order than viewing each other with

trepidation. Improving the American response to China's rise as a power peer is imperative to U.S.-Sino relations as well as for enhancing cooperation on global challenges. China and the United States are not destined to be rivals as many experts have speculated. The two world leaders undoubtedly have varying interests and priorities. However, China's economic growth and prosperity relies heavily on U.S. imports, while the United States depends on China's cheap manufacturing and emerging market to grow American businesses. "Inevitably, as China moves up the economic and technological ladder, it will compete with America and expand its global reach. But a much graver danger is that as China rises in power, the United States will misread and mishandle it, so that we find ourselves embroiled in a hostile relationship with it" (Shirk, 2007, p. 4).

Misreading China's rise could cause several areas of conflict in US-Sino relations or enflame existing tensions surround Taiwan or the South China Sea.

The world has changed because of economic globalization and information technology and international relations has not escaped the revolution. International relations have traditionally been understood by the dominance of a state's military power. However, economic globalization and "the Internet have shattered these assumptions" (Choucri & Clark, 2012, abstract). China's economic success has shifted the balance of power causing the power of the United States to decline. Information technology supplements the power diffusion created by economic globalization. A cyber attack on the critical infrastructure, financial and business networks, and military operations and communication systems produce severe consequences the United States is ill

prepared to manage. China has capitalized on its abundance of low-value added manufacturing and the vulnerabilities of information technology to become a power peer of the United States.

“The rise of China surely ranks among the most important world developments of the last 100 years” (Unz, 2012). Concerns have spread to mainstream dialogues of everyday Americans with the likes of Donald Trump touting doomsday scenarios of China’s rise. Many are concerned that America’s international influence and power is diminishing due to China’s thriving economy and persistent cyber attacks. The ultimate fear is that China will become the world’s twenty-first century superpower leaving the United States an historical empire of the twentieth. The United States may no longer be the only superpower, but American global power will endure into the twenty-first century.

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