

– 21st Century Chinese Military Power Projection –

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09 December 2013

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Intelligence and National Security Studies Program

INSS 5390 - Capstone Project

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Introduction

Covering 9,596,961 square kilometers and with a population exceeding 1.3 billion, *Zhong Guo*,¹ the Middle Kingdom, is the largest country in East Asia and one of the most important in that region.² The political, economic, cultural, and military impact of its internal apparatuses, however, transcends its sheer size in importance. The People's Republic of China (PRC*) has achieved global power status as a result of seven major philosophical changes implemented since the Deng Xiaoping era: an economy that is open to world market forces; the development of regional and overseas trade agreements; establishing significant control over global production (achieving "factory of the world" status); increasing demand for external resources; deepening involvement throughout the globe via intergovernmental organizations (e.g. the United Nations) and economic influence; conducting domestic and foreign intelligence operations (e.g. corporate espionage, agent recruiting, and cyber operations);³ and rapidly expanding information and military (I&M) capabilities.

Strategists believe twenty-first century politics will be molded by a China fueled by its stunning economic output. The PRC is currently the largest recipient of foreign direct investment; it has sizeable cash reserves (an equivalent of 2.1 trillion U.S. Dollars in foreign exchange)⁴; and it has emerged as the second largest economy in the world. China's economic power was notable during the first half of the 2008 global financial crunch when many great powers seemed to slope backward. During that period, the PRC was responsible for one-third of global gross domestic product (GDP) growth, and its economy grew at a fascinating rate of 8 percent in comparison to previous years.⁵ Contrarily, the 'Great Recession' brought to the United States (U.S.) a spell of unemployment, a mortgage crunch, shrinking paychecks, shattered household budgets,⁶ and approximately a ten-fold increase in the credit default swap market spread for treasuries.⁷ In any case, China's I&M capabilities, led by a productive economy, will set the tone for the country's regional foreign policy for years to come.

Presently, a sensation looms that a second tier of major countries, including Brazil, China, France, Germany, India, Russia and the United Kingdom, is balancing the U.S. in power projection and distribution.⁸ The 'rise of the rest' is legitimate given that the U.S. is "stretched

¹ Sue-mei Wu et al., *Chinese Link: Beginning Chinese*, (Boston: Prentice Hall, 2011), 34.

² "The World Factbook," last modified November 12, 2013, <https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>.

*For clarification purposes, the term 'China' in refers to the People's Republic of China. On the other hand, the Republic of China is referred to as Taiwan.

³"Chinese spies use conferences to find targets," last modified October 31, 2013, www.theepochtimes.com/n3/336240-chinese-spies-use-conferences-to-find-targets/

⁴ Eric C. Anderson, *China Restored: The Middle Kingdom Looks to 2020 and Beyond* (Denver: Praeger, 2010), 1.

⁵ Robert Benewick and Stephanie Hemelryk Donald, *The State of China Atlas: Mapping the World's Fastest Growing Economy* (Berkeley: University of California Press, 2009), 7-13.

⁶ Brent Jones, ed., "Recession's Effects Hit Majority in U.S.," *USA Today*, September 26, 2010, final edition, http://usatoday30.usatoday.com/money/economy/2010-09-27-recession27_ST_N.htm (Accessed April 27, 2013).

⁷ Stuart S. Brown, *The Future of U.S. Global Power: Delusions of Decline* (New York: Palgrave Macmillan, 2013), 195. A 'credit default swap' (CDS) is a financial instrument that provides insurance against the prospect of default. An increase in the CDS spread indicates an increased demand for protection from a perceived default.

⁸ Fareed Zakaria, *The Post-American World* (New York: W.W. Norton, 2009), 4.

militarily, in debt financially, divided domestically, and unpopular internationally.”⁹ As rising powers vie for increased influence and visibility in the world stage, it is important to assess how the PRC, arguably the leading up-and-coming country, will eventually gain the upper hand in normalizing the balance of power in at least the Asia-Pacific region.

Purpose & Importance

History is filled with examples of aggressive and relatively peaceful power transitions. Two examples that illustrate this point are the militant German challenge to Britain in the first half of the twentieth century and the peaceful transfer of global leadership from the British Empire to the U.S. following World War II. Since East Asia is a politically sensitive region with many powerful, influential actors – China, Japan, the Koreans, Taiwan, Russia and the U.S.,¹⁰ it is important to analyze the lopsided growth of the PRC and its resultant power projection.

This research explores the expansion of Chinese I&M capabilities and how such growth can affect the country’s foreign policy. The Diplomacy-Information-Military-Economics model (DIME) is used since it prompts analysts to categorize a state’s power and influence based on multiple variables, instead of primarily attributing one factor to the state’s rise. Since vast amounts of literature focus on diplomacy and economics (D&E), this piece will briefly touch on D&E but focus more on the interrelated Information and Military (I&M) variables. While the Chinese economy is impressive and its diplomacy is certainly influential, the PRC is barely “catching up” in terms of its I&M capabilities. Since China cannot directly match states with greater conventional capabilities, it is focusing on expanding its conventional I&M ordnance while simultaneously developing an asymmetric strategy which can potentially destabilize the Asia-Pacific region. The PRC’s power projection is important in light of the current air defense identification zone.

The Evolution of Post-Deng D&E Policies: Setting the Tone for Today

Diplomacy is invaluable to the Chinese pursuit of legitimacy and greater hegemony. After Deng Xiaoping emerged as the Chinese Communist Party (CCP) Chairman in 1977,¹¹ the leadership sought to implement the ‘four modernizations’ in agriculture, industry, science, and defense. Central to this effort was aligning the country’s economic, security, and political objectives. While economics dominated the discussions of modernization, politics gave priority to peace and development. Security, though marginalized, was concentrated on analyses of regional and global power rebalancing.¹² This remains the case today.

⁹ Charles W. Kegley, Jr. and Shannon L. Blanton, *World Politics: Trend and Transformations*, 2010-2011 ed. (Boston: Wadsworth, 2011), 91-99. Part of a quote from Richard Haas, president of the Council on Foreign Relations, who warns that the U.S. is a preeminent power facing an incoming decline.

¹⁰ Barbara A. Weightman, *Dragons and Tigers: A Geography of South, East and Southeast Asia* (Danvers: John Wiley & Sons, Inc., 2011), 270-380.

¹¹ Ibid.

¹² Gilbert Rozman, *Chinese Strategic Thought toward Asia* (New York: Palgrave Macmillan, 2010), 47-66.

The following three points dominated the leadership's discourse then, and set the tone for the present. First, the PRC has historically been fearful of encirclement by a superpower. During the Cold War, it perceived Vietnam's infringement on Cambodia and the Soviet invasion of Afghanistan as menacing maneuvers to its sovereignty. The second point of concern was how to deal with American foreign policy and its capitalist system. The CCP prioritized learning from advanced experience, and gave the edge to capitalist rather than socialist undertakings. However, the CCP was still distrustful of the U.S. due to President Carter's refusal to support China's attack on Vietnam and because of the ongoing American rhetoric on Taiwan. This feeling is still harbored by the CCP today. The third point of concern was the evolution of Japan and its aspirations to become the primary power in Asia-Pacific. The CCP has always been concerned with the rise of Japan and its profile as a victimizer, but the major fixation has always remained on balancing superpowers. This point has also withstood the test of time.

As Deng painted a 'pragmatic' Chinese communism, he also preached a flexible and non-ideological foreign policy. In the eyes of the CCP, China would position itself at the apex of an equilateral power triangle in which it would balance the 'socialist elder brother' and the propagator of 'anti-communist middle-class evolution.' It achieved this by encouraging the Soviet Union and the U.S. to seek stability and to step back from their costly arms race.¹³ The end goals of the initiative were to increase China's comprehensive national power, gain enough leverage to limit external influence, and more importantly, to reduce the I&M gap between China and the leading powers.

During the late 1980s, it became visible that the East European states and the Soviet Union could collapse. Thus, the CCP grew concerned with the shift of the international system toward U.S.-centered unipolarity.¹⁴ Suddenly, Soviet military encirclement diminished as a concern and the U.S.-led ideological 'offensive' gained further attention. This expedited attempts to improve Soviet ties, but as Gorbachev gave priority to closer ties with the U.S., the CCP decided that it needed a peaceful environment to continue its modernization. As a result, China kept a low profile on its discontentment and continued to open itself economically.

From the 1980s to the mid-1990s, the diffusion of Western values was feared more than the actual preponderance of power. The problem was ideological penetration and not necessarily economic ties.¹⁵ The triumph of capitalism and Western ideology over the socialist bloc, and the quick and decisive American military victory in the Persian Gulf War justified this concern. Since the CCP also feared losing Taiwan forever, it began working on policies to deflect Japanese political support for it, and simultaneously build a military deterrent to dissuade the U.S. from intervening. Furthermore, China did not want to get marginalized by greater military might, get shoved back to a peripheral role in the global stage, or become weak and overly dependent on a vertical division of labor with its 'traditional civilization' subdued by westernization.

In light of a short recession and political division in both the U.S. and Japan, China proceeded with its full-scale production and borrowing from capitalist economies in order to

¹³ Rozman, *Chinese Strategic Thought toward Asia*, 51.

¹⁴ Charles W. Kegley, Jr. and Shannon L. Blanton, *World Politics: Trend and Transformations*, 96-97.

¹⁵ Rozman, *Chinese Strategic Thought toward Asia*, 55.

catch up industrially. Therefore, it was necessary for it to maintain positive relations with all the players in Asia-Pacific and to simultaneously keep the most important actors focused on their own issues. Having extended its clout to Southeast Asia and across the Korean peninsula, China began pressing for a multipolar region in order to take away power from the U.S. As one may note, China has continuously worked to overthrow the U.S. as the regional hegemon.

Being a charter member of the United Nations and one of the five permanent representatives in its Security Council, China has consistently ranked among the most influential countries in the world. Since the latter half of the 1990s and the start of the twenty-first century, it has continued to make notable strides in its soft power. Regionally, it joined the Association of Southeast Asian Nations Plus Three (ASEAN +3), and since then Chinese diplomats have established a free-trade zone with ASEAN, signed a code of conduct for the South China Sea, visited India and reached de facto agreement on the status of Tibet and Sikkim, met with Taiwanese Nationalist leaders to set up representative offices in each other's territory, visited Japan and addressed its parliament to jointly develop a gas field in the East China Sea, and brokered the Six Party Talks for the denuclearization of the Democratic People's Republic of Korea. China has also signed strategic energy deals, conducted joint military exercises (e.g. the Shanghai Cooperation Organization), hosted head of state visits, and negotiated border agreements with Russia.¹⁶

China's clout extends overseas as well. Since 1995, it has held summits with the European Union over human rights, climate change, satellite operations, high-level economic and trade dialogues, and international law. In Africa, it has pledged to boost trade and investments, extended loan and credit agreements, begun intercontinental business deals (e.g. bought stake in Nigerian offshore oil and gas fields), and vowed to double humanitarian assistance. China has also supported coalition forces in Afghanistan, voted for a United Nations ultimatum to Iraq, hosted head of state visits, and reaffirmed economic dialogue and trade relations with the U.S. Former President Hu Jintao also visited Argentina, Brazil, Chile and Cuba during his tenure to pledge investments and aid.¹⁷ As one may note, the tentacles of Chinese diplomacy reach every corner of the world. This trend will continue as long as China remains a top actor in international governmental organizations and a prime stakeholder in world-wide commercial ventures. One may also appreciate that China is pressing for a multipolar world order and has tactfully modeled its domestic and foreign policy to carry out its comprehensive national agenda.

The Nexus of the 'I' & 'M' in the context of the Revolution in Military Affairs

The I&M categories of the DIME are intertwined since the development of one has a direct, positive correlation on the other. According to the authors of a 2001 RAND Corporation study, a peer competitor must have multidimensional power; it must harness a strong military that complements intellectual, technological and economic power.¹⁸ The key characteristic is

¹⁶ Benewick and Donald, *The State of China Atlas: Mapping the World's Fastest Growing Economy*, 20-21.

¹⁷ Ibid.

¹⁸ Eric C. Anderson, *China Restored: The Middle Kingdom Looks to 2020 and Beyond*, 3-4.

intellectual power. After all, it is the know-how and experience that stimulates creativity and progress in science, technology, and military research and development.

After the collapse of the Soviet Union, the net Chinese government expenditure on education was roughly 73 billion yuan. Months prior to the Taiwan Strait Crisis of 1995, that figure had risen to 188 billion yuan. Eleven years later, that figure had increased astonishingly by more than 250 percent to 478 billion yuan. By 2006, the number of university undergraduates totaled 5.5 million. This figure, the highest ever, corresponded to a 75 percent success rate in enrolling senior secondary graduates in higher education. Of those students, a whopping 36 percent were registered in engineering programs, making it the most popular academic field.¹⁹

The number of Chinese students studying abroad also increased to the point that their influence can be felt tangibly. For example, in May 2008, the London Metropolitan University (LMU) awarded an honorary doctorate to the Dalai Lama. Such an event sparked a Sino media outrage that compelled the university's vice-chancellor to apologize publicly for stirring controversy. The apologetic move was done with hopes that the 434 Chinese nationals at LMU would continue their studies there. This example is a testament to the importance of the Chinese market for universities outside of the mainland.²⁰

The Chinese RMA

Why the push toward greater accessibility to education and increased academic rigor? The answer lies in the Chinese embrace of the concept of the Revolution in Military Affairs (RMA). The RMA is an ongoing broad doctrinal evolution and debate about the technology, strategy, tactics, and use of intelligence as it pertains to the likely nature of future warfare.²¹ The idea was first proposed in a series of publications by Soviet Armed Forces Marshal Nikolai Ogarkov in light of superior American technology.²² Proponents argue that through rapid advances in communications, information, and precision technologies, military forces could “skip a generation” of conflict and achieve “full-spectrum dominance” over any adversary. Early supporters legitimized their operational concepts using computer simulations against mirror-imaged adversaries.²³

Overtaken with surprise and mixed emotions from the end of the Cold War, the declining proportion of major inter-state wars, and the rapid and definitive victory of the U.S. in the 1991 Gulf War, China gained a fuller appreciation of the RMA. For the most part, strategists attributed a large part of the Gulf War victory to ‘AirLand Battle,’ a historic logistical feat (735,000 coalition troops assembled as well as 6.859 million tons of equipment and supplies airlifted and

The 2001 RAND Corporation publication was titled, *The Emergence of Peer Competitors: A Framework for Analysis*.

¹⁹ Benewick and Donald, *The State of China Atlas: Mapping the World's Fastest Growing Economy*, 82-83.

²⁰ Martin Jacques, *When China Rules the World: The End of the Western World and the Birth of a New World Order* (New York: The Penguin Press, 2009), 317-318.

²¹ Mark M. Lowenthal, *Intelligence: From Secrets to Policy* (Washington, D.C.: CQ Press, 2012), 301-302.

²² Steven Metz and James Rievit, “Strategy and the Revolution in Military Affairs: From Theory to Policy,” Air War College (1995) <http://www.au.af.mil/au/awc/awcgate/ssi/stratrma.pdf> (Accessed April, 13, 2013).

²³ Patrick M. Cronin, ed., *The Impenetrable Fog of War* (London: Praeger Security International, 2008), 99.

sea-transported in six months), precision-guided munitions, and overall information dominance.²⁴ Commenting on ‘dominant battlefield awareness,’ a product of the RMA, former Director of Central Intelligence John M. Deutch (1995-1997) stated that the integration of major technical collection disciplines – imagery, signals, and human intelligence – gave “commanders real-time, or near real-time, all-weather, comprehensive, continuous surveillance and information about the battlespace in which they operate. . . . Dominant battlefield awareness, if achieved, [may] reduce – never totally eliminate – the ‘fog of war,’ and provide...the military commanders, with an unprecedented combat advantage.”²⁵

The key lessons from Operation Desert Storm were: (1) that the centrality of information can make an entire country a grid for key attacks; (2) preemptive strikes, surprise and deception are fundamental to victory; (3) high-tech arms vastly increase firepower, accuracy, mobility and survivability; (4) high-tech arms must be operated by well-educated technical personnel; (5) real-time information flow can be achieved through Command, Control, Communications, Computing, Intelligence, Surveillance and Research (C4ISR) capabilities; (6) logistics support ensures quick maneuvers and swift redeployment; and (7) joint operations have combat-multiplying effects.²⁶

Since 1999, writings from the People’s Liberation Army (PLA) have indicated familiarity with American professional journal articles on the RMA. More importantly, PLA writing places the RMA in the same subject as asymmetric warfare. According to a former high ranking officer at the National Defense University, 64 PLA authors described in detail the weaknesses of U.S. armed forces.²⁷ This indicates that the PLA perceives the U.S. military as the gold standard, which it not only strives to emulate, but rather surpass.

Chang Mengxiong, former senior engineer of the Beijing Institute of Systems Engineering of China’s Commission for Science, Technology and Industry for National Defense, pointed out that “the inferior can defeat the superior” by attacking space satellites, airborne early warning and electronic warfare aircraft, and ground command sites.²⁸ From 1999-2009, world military spending increased by 45 percent to \$1.46 trillion USD, and it grew at an average annual rate of 4 percent between 2001 and 2009. That output constituted 2.4 percent of the 2009 global GDP. Divided into a time-scale, the world spent over 2.785 million USD each minute on defense technologies. China led the developing countries in total expenditures for C4ISR capabilities.

Since China has the financial resources to pursue the RMA, how can it achieve ‘dominant battlefield awareness,’ and what must its military do? According to the Program for Joint Education at the U.S. Army War College, the answer is the following: the PLA must improve its Information Warfare, Precision Strike, Dominating Maneuver, and Space Warfare capabilities. In

²⁴ Paul D. Williams, ed., *Security Studies: An Introduction* (New York: Routledge, 2008), 401; Armin Krishnan, *War as Business: Technological Change and Military Service Contracting* (Burlington: Ashgate, 2008), 17, 68, 75, 110. AirLand Battle was a conceptual framework that pressed for close coordination between land and aerial forces, resulting in a rapid and aggressive engagement.

²⁵ Lowenthal, *Intelligence: From Secrets to Policy*, 301.

²⁶ Eric C. Anderson, *China Restored: The Middle Kingdom Looks to 2020 and Beyond*, 127-128.

²⁷ James R. Lilley and David Shambaugh, eds. *China’s Military Faces the Future* (Washington, D.C.: American Enterprise Institute, 1999), 64-79.

²⁸ Ibid.

turn, it must acquire and manufacture indigenous Intelligence, Surveillance, and Reconnaissance (ISR) capabilities.²⁹

The Value of ISR Systems

ISR systems include unmanned aerial vehicles (UAVs), manned aircraft, fixed- and mobile-based sensors (e.g. undersea acoustic surveillance; electro-optical; surface-surveillance radar; multi-, hyper-, and ultra-spectral; seismic; and radio-frequency geolocation), satellites (e.g. Earth-observation; remote-sensing; weapons-guidance; communications; navigation; and weather-monitoring), automatic target classification and decision support systems, as well as high-performance computing systems.³⁰ These are indispensable components of national policymaking, military operations, and even counterterrorism applications. They expand situation awareness and provide information on the military capabilities of states and non-state actors, the location of key defense and industrial sites, evidence of the presence of weapons of mass destruction, and even insight into the plans of adversaries. Essentially, they are necessary for defense planning and to enforce arms control agreements.³¹

Universal ISR Challenges

The universal challenges associated with the acquisition or use of ISR are the following: diverse mission and information requirements from the intelligence services and armed forces; distinct operating environments (ground, sea, undersea, air, space, and cyberspace); contrasting joint versus elemental assets and their integration; the use of systems to achieve tactical versus strategic goals; and the need to balance sensor data-collection capability against planning, collection, processing, analysis, and dissemination requirements. Managing this process demands extensive coordination of requirements between the intelligence and military services' leadership, competent engineers to adapt the systems to the operating environment, software developers and telecommunications professionals to integrate the different sensors and ensure near real-time data flow, budget and financial handlers to administer the joint government-private sector investments, and subject matter experts to guide the use of the systems in search of the most efficient ways to retrieve critical information.³² Moreover, the armed forces need to provide costly and time-intensive training to the personnel operating the ISR architectures. On this note, personnel must be carefully selected and vetted in order to avoid a counter-intelligence disaster. Given the reliance on multiple private sector firms to develop ISR, contracts have to be

²⁹ Jane E. Gibish, ed., "Revolution in Military Affairs: A Selected Bibliography," U.S. Army War College (1996) <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA309789> (Accessed April 14, 2013).

³⁰ Massachusetts Institute of Technology Lincoln Laboratory *ISR Systems and Technology* <http://www.ll.mit.edu/mission/isr/ISRsystems.html> (Accessed April 15, 2013).; Johanna A. Montgomery, ed., *Intelligence, Surveillance, and Reconnaissance: Acquisitions, Policies and Defense Oversight* (New York: Nova Science Publishers, Inc., 2011), 1-21.

³¹ Ibid.

³² Air Force Studies Board, *Capability Planning and Analysis to Optimize Air Force Intelligence, Surveillance, and Reconnaissance Investments* (Washington, D.C.: The National Academies Press, 2012), 12-31, 39, 74-94.

extended to ensure adequate sustenance of the systems. Control and ground support stations, storage facilities, and research plants have to be maintained at great cost as well.

As one may note, these are challenges that preclude intelligence- and armed services from devoting their full attention to grand strategy. Instead, decision-makers find themselves busy lobbying for increased funding, attempting to change national morale via the media (e.g. congressional hearings on military expenditures televised through C-SPAN), and integrating existing systems to scenarios that they were not originally developed for. The effort to adapt and modify costly systems to evolving forms of warfare in lieu of questioning the changing character of conflict is in itself a logical fallacy. Rather than thinking about defense through fantastical lenses, strategists need to contemplate the emerging threats to their respective national security situations. Examples of threats changing the character of conflict include the increase of global arms shipments, insurgencies, the expansion of terrorism and state-sponsors, hybrid warfare, and asymmetric warfare.

In some instances, failures can attract negative media and discontentment. For example, in the U.S., the Space Based Infrared System and the Future Imagery Architecture, along with present fiscal challenges, make the viability of upgrading existing ISR systems questionable to both Congress and the general public. After all, military expenditures incur opportunity costs; from the public eye, they stunt economic growth, create fiscal deficits, and wear down national welfare. A fitting metaphor is provided by political scientist and author Richard Rosecrance: “States can afford more ‘butter’ if they need fewer ‘guns.’ ”³³

Also, the inability of the Department of Defense (e.g. the National Security Space Office and the newly-established Space Intelligence Office within the Office of the Under Secretary of Defense for Acquisition Technology) to provide comprehensive direction at less expensive rates and greater coordination is bemusing.³⁴ Planning and budgeting for ISR missions are carried out independently by the Intelligence Community (IC) and the military services. Therefore, the end results typically lack common standards and efficient communications systems which prevent them from operating in a coordinated mode.³⁵

Strategists and decision-makers should focus on answering pertinent questions, such as the following: What kinds of conflict should the state and its allies prepare to fight? Who are our present and future adversaries? Are they state, non-state, or transnational forces? How much weight should be attributed to conventional deterrence? How much thinking shall be dedicated to hybrid wars? How are ‘military operations other than war’ gaining ground? For which types of engagements is the military prepared to fight, and can it fight conflicts it is not prepared for? What would be the response times to the different types of conflicts? How many casualties can

³³ Charles W. Kegley Jr. and Shannon L. Blanton, *World Politics: Trend and Transformations*, 283.

³⁴ Montgomery, *Intelligence, Surveillance and Reconnaissance: Acquisitions, Policies and Defense Oversight*, 7. The Space Based Infrared System is a package consisting of infrared sensors that is set to provide early missile warning, missile defense and battlespace characterization. Its cost exceeded its original budget of \$3 billion USD by at least 7.5 billion USD; its expected construction date of 2002 was pushed to late 2010/early 2011. Due to budget limitations, prolonged schedules, and contractor inexperience, the Future Imagery Architecture was canceled in 2005 after billions of USD had been invested.

³⁵ Air Force Studies Board, *Capability Planning and Analysis to Optimize Air Force Intelligence, Surveillance, and Reconnaissance Investments*, 25.

the adversary inflict on us? How are the state and its allies vulnerable to strategic surprise? How can intelligence services reduce that risk? Under what assumptions are intelligence and military services planning, training, and equipping? How stable is the state's hegemonic position in the international system?

Perhaps the most pertinent questions both the American and Chinese leadership are contemplating, include: What lessons can be drawn from the wars in Afghanistan and Iraq as well as the 2006 conflict between Israel and Hezbollah? Is each respective state prepared to engage in asymmetric warfare (e.g. outer space and cyberspace operations)? Can current defense capabilities protect critical infrastructure from asymmetric attacks? What is the future outlook of civil-military relations on the domestic and international scale? What is the adversary's trend in military spending? How is the adversary allocating its planning and budgetary resources?

Despite the increase in arms shipments following the Cold War, an increasing number of states are funding their own research and development programs. The United Kingdom, France, Germany and Italy, along with the U.S., account for at least 75 percent of global arms production. However, trends like defense downsizing, company mergers, industry privatization and export-oriented businesses dominate the global enterprise. The number of fixed-wing aircraft, launch vehicle, satellite, naval vessel, and tactical combat/missile companies steadily declined between 1990 and 2000.³⁶ It would be illogical to think that the now ever-more powerful conglomerates (most of which are American and European) will limit their profit-potential by selling sensitive technologies to a limited customer base in the open-globalized market economy. After all, Western countries favor economic liberalization and smooth trade practices. According to studies conducted by the Congressional Research Service on arms transfers to developing nations, the Global South and middle-income countries were responsible for 59.7 percent of global arms deliveries. The business is extremely lucrative as it was valued at more than \$550 billion USD in 2009.³⁷ As one can imagine, a greater number of countries, led by the PRC, are acquiring advanced warfare systems. If the trend continues, the technical advantages enjoyed by the U.S. will be counterbalanced by conventionally-weaker states. As a result, the fog of war thickens as ISR technologies propagate.\

Conventional Capabilities of the PRC

Although Chinese rhetoric focuses on downsizing the PLA, PLA Air Force (PLAAF), PLA Navy (PLAN) and the Second Artillery, the Chinese armed services remain the largest in the world with 2.1 million active-duty personnel, approximately 0.8 million in the reserves, and 1.5 million as military police. Truly, the Chinese armed forces have not shrunk. Also, by 2008, China was spending roughly 52 billion USD more than Russia in total military expenditures. The net total was 122 billion USD to be exact. At that point in time, the Chinese armed forces counted with approximately 13,160 tanks and armored vehicles, over 2,500 military-rated aircraft, about 900 naval vessels, and roughly 160 nuclear warheads of which multiple

³⁶ Krishnan, *War as Business: Technological Change and Military Service Contracting*, 25-29.

³⁷ Charles W. Kegley, Jr. and Shannon L. Blanton, *World Politics: Trend and Transformations*, 287-301.

independently targetable reentry vehicle (MIRV) capability is unknown. This is a crucial aspect since one MIRV missile can afford up to 12 strikes with only one launch.³⁸

The centerpiece of China's coercive conventional aerospace power consists of ballistic and land-attack cruise missiles. These systems have long been an instrument of psychological and political intimidation, and their lethality and accuracy have continued to improve. Given that these are necessary for the achievement of information dominance and air superiority in a conflict, the armed services have expanded their brigades across the provinces and even moved into the more populous regions of China (e.g. along the Pacific Rim and the northeast where the government structure lies). Currently, missile bases are known to exist in the following provinces, cities, and mountainous areas: Shenyang, Anhui, Kunming, Yunnan, Guangxi, Guizhou, Henan, Huaihua, Jiangxi, Xining, Qinghai, Xinjiang, Gansu, Taibai, and in the Qinling Mountains of the Shaanxi Province.^{39,40}

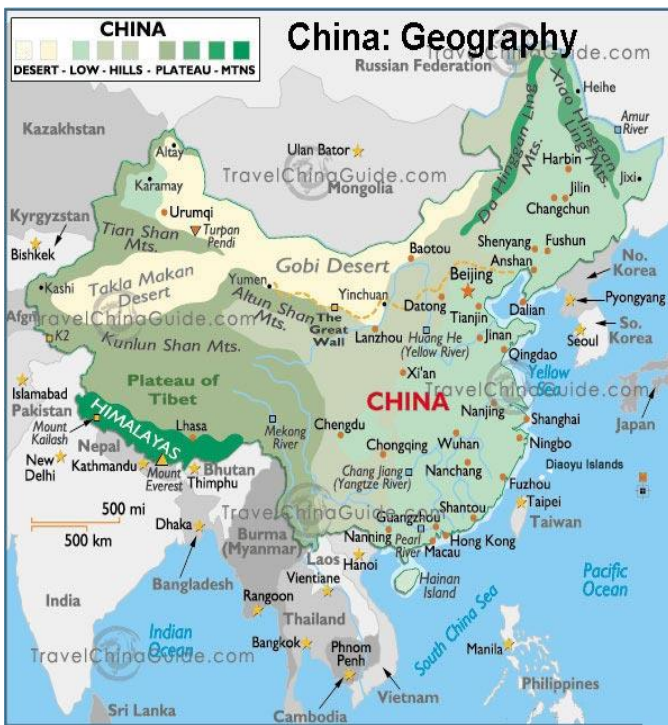


Image Above: Geography of the PRC

Image Right: CCP Perception of its Provinces Including the Republic of China (Taiwan)

³⁸ Benewick and Donald, *The State of China Atlas: Mapping the World's Fastest Growing Economy*, 68-69.

³⁹ Provincial Map of China, last modified, 2013,

<http://www.bing.com/images/search?q=province+map+of+china&id=3A79F06E2C2912D2BA4BAC1DD67CA078A4EF4335&FORM=IQFRBA#view=detail&id=1EC67A9394CB7EC9A4E7E796E9258538D9D53DF6&selectedIndex=1>

⁴⁰ Geography of China, last modified 2013, <http://www.travelchinaguide.com/images/map/china/china-map-7.jpg>

PRC Asymmetric Achievements

The PRC has made remarkable achievements regarding its anti-satellite weapons technology and cyber-offensive capabilities.⁴¹ For example, it tested its first anti-satellite weapon in 2007, and the country was credited with the engagement of ‘Operation Aurora’ and ‘Ghostnet’ in 2009.⁴² Central to these operations are computing and operating systems. So, why would China urge for ‘informationized’ warfare (IW)? Well, the centrality of information on the battlefield makes key nodes visible across the broad front. In other words, forces do not have to launch full-scale invasions, but rather the entire country becomes a battlefield as critical striking areas emerge.

The PRC has made increasing efforts to acquire weapons systems and integrate them with information technology to improve firepower, range, accuracy, mobility, and survivability.⁴³ To support power projection overseas, improve kinetic operations around its periphery, and to perhaps gain a strategic advantage, China has continued to extend the range of its aerospace power. The PLA has long been unable to engage in military ventures due to aerospace technology limitations. Therefore, the development of aerospace capabilities is competed for between the Second Artillery, the PLAAF, and the PLAN.

The tug-of-war between these services to determine which one will take control of direct ascent anti-satellite capability, anti-ballistic missile capability, precision-guided munitions, air-to-surface ballistic missiles, and short-range ballistic missiles (e.g. the DH-10, DF-21C, CSS-6, DF-15C&D series, and CSS-7/DF-11 missiles) continues.⁴⁴ On this note, these missiles have the range to reach Taiwan and render its defenses as well as critical infrastructures inoperable. Under the right DIME circumstances, the U.S. could be forced to the bargaining table at least over the Taiwan issue.

The PLA has achieved the development of indigenous navigation, maritime surveillance, and micro-satellites with space control capabilities (e.g. Haiyang satellites). While the reliability of these technologies is still in question, personnel will continue to study and improve C4ISR data handling, sensing, and monitoring. These capabilities may “change the game” for the PLA by offering reliable positioning signals, grid-like key attacks (e.g. the Beidou navigation satellites system continues to gain traction), differentiation between enemy and friendly forces, weather monitoring, technical surveillance, tactical development, and overall a greater repertoire of operations. Moreover, as personnel put these capabilities into action, they can simultaneously learn how to jam and attack ground stations, interfere with adversaries’ space equipment, and disrupt military as well as commercial ventures.⁴⁵

⁴¹ Bruce W. MacDonald, *China, Space Weapons, and U.S. Security* (Washington, D.C.: Council on Foreign Relations, 2008), 3-11.

⁴² Infosec Island, *Chinese Military Advocates Cyber Offensive Capability* <http://infosecisland.com/blogview/21194-Chinese-Military-Advocates-Cyber-Offensive-Capability.html> (accessed April 15, 2013).

⁴³ Eric C. Anderson, *China Restored: The Middle Kingdom Looks to 2020 and Beyond* (Oxford: Praeger, 2010), 127-142.

⁴⁴ Erickson and Goldstein, *Chinese Aerospace Power: Evolving Maritime Roles*, 7-15.

⁴⁵ Pillsbury, “An Assessment of China’s Anti-Satellite and Space Warfare Programs, Policies and Doctrines,” 7.

The 2007 anti-satellite weapon test demonstrated that the PLA has moved from the theoretical to the operational phase in terms of space weaponry. On this note, the PLA has developed or is currently developing kinetic anti-satellite weapons, micro-satellite ‘space mines,’ and directed energy weapons (e.g. lasers, high power microwave systems, nuclear-generated electromagnetic pulse capabilities, jammers, and high-frequency radar stations and electromagnetic emitters). The purpose of these systems is six-fold: to counter missile defense systems, disrupt commercial ventures, blind military ISR, set up emergency and crisis launch units, carry out surprise and preemptive attacks on space infrastructure, disable C4I systems during a conflict, conduct offensive ISR, and even destroy targets from outer space.⁴⁶

Another asymmetric development is the advent of cyber-war capabilities. Direct computer espionage has become an integral component of the activities of the Ministry of State Security, Ministry of Public Security, and the intelligence divisions of the armed services. The growing importance of IW to the PLA is driving it to acquire comprehensive computer network exploitation techniques, exercise electronic warfare, and to implement kinetic strikes on adversarial ISR systems. This formal IW strategy is called the “Integrated Network Electronic Warfare” (INEW) and it consolidates the offensive mission for both the PLA General Staff Department’s (GSD⁴⁷) 3rd Department (Signals Intelligence) and GSD 4th Department (Electronic Countermeasures) as well as specialized IW militia units.

Using the pretext of economic cooperation, Chinese spies have collected economic as well as military secrets. The United States is especially vulnerable to computer network attacks since it relies heavily on communications systems, computer networks, and electronic equipment to process and store information. Moreover, the majority of American corporations either has offices in the PRC or operates completely out of the PRC. Not surprisingly, the Chinese External Liaison Department has used intrusive methods (e.g. monitoring data communications and computers, or eavesdropping on digital links) and nonintrusive methods (employing interns, students, tourists, and professors) to report any findings to Chinese authorities.⁴⁸

Under the guidance of the Central Military Commission and the Academy of Military Sciences, the PLA is intensively training and equipping its hacking force with an adequate arsenal of IW tools for intelligence collection and analysis. Such an effort extends to hiring civilian personnel from commercial industries and academia, as well as “black hat” programmers; it calls them to participate in penetrations of foreign governments and networks. The main objectives of this hacking group are to prepare to fight ‘Local Wars Under Informationized Conditions,’ seize control of an adversary’s information flow, establish information dominance, target enemy C4ISR and logistics systems, disrupt enemy decision-making capabilities and order of battle, and achieve “new strategic high ground” by considering space warfare ordnance, tactics, operations, and strategy.⁴⁹

⁴⁶ Michael Pillsbury, 10; Peter L. Hays, *Space and Security*, 2011; Bruce W. MacDonald, *China, Space Weapons, and U.S. Security*. Washington, D.C.: Council on Foreign Relations, 2008.

⁴⁷ The General Staff Department is the highest organizational authority in the PLA responsible for its administrative duties. It is comprised of seven functional departments: operations, intelligence, signals intelligence, electronic countermeasures, communications, mobilization, foreign relations, and management.

⁴⁸ Edwin Fraumann, "Economic Espionage: Security Missions Redefined," *Public Administration Review* 57, no. 4 (1997): 303-306.

⁴⁹ Bryan Krekel, "Capability of the People’s Republic of China to Conduct Cyber Warfare and Computer Network

Between 1999 and 2009, the PRC was involved in at least 35 computer network attacks or threats to attack against the U.S., Taiwan, and other countries. The number and sophistication of the attacks was positively correlated with experience. These attacks have been aimed at the following targets: U.S. government websites; Taiwanese government websites; denial of service against U.S. and Taiwanese private companies; attacks on Taiwan's Kuomintang Party, Democratic Progressive Party, and the Ministry of National Defense's Military News Agency; unclassified U.S. military systems at the U.S. Army Information Systems Engineering Command, the Defense Information Systems Agency, the Naval Ocean Systems Center, and the United States Army Space and Strategic Defense Installation; Japanese industrial and university websites; intrusions into the U.S. Department of Defense systems (e.g. Operation Titan Rain); Taiwan National Security Council email system; the email systems of Taiwan's Ministry of National Defense and the American Institute in Taiwan; U.S. Department of State networks, including the Bureau of East Asian and Pacific Affairs, which is responsible for policy coordination on China, North Korea and Japan; the Pentagon's Non-classified Internet Protocol (IP) Router Network; hacking of U.S. Congressmen and their staff (e.g. U.S. Representative Frank Wolf)⁵⁰; U.S. Naval War College infrastructure; email system of the U.S. Office of the Secretary of Defense; German government entities (e.g. Federal Chancellery, Ministry of Economics and Technology, and the Federal Ministry for Education and Research); United Kingdom's Foreign Office and Military Intelligence 5 (domestic intelligence service); New Zealand's secret service; email system at U.S. Oak Ridge National Laboratory (e.g. nuclear weapons division); Australian security agencies; Indian government and private sector; Belgian government websites and systems; U.S. White House information system; *Business Week* magazine and Google; and numerous embassies across the globe which the Dalai Lama visited;⁵¹ and Operation Aurora⁵² and Ghostnet in 2009.⁵³

Regional Conflict

In the event of a regional conflict (e.g. Taiwan Strait crisis), China would likely deny the U.S. and its regional allies access to the East China Sea. At present, however, China's submarine-focused PLAN and limited PLAAF can only support limited sea denial and offensive counter-air operations. In any case, China's ability to deny strategy and delay attacks is potent. China's land and sea-based ballistic and cruise missiles along with the number of boots on the ground in coastal areas can directly challenge superior American/allied platforms and threaten American regional interests (e.g. Taiwan, trade agreements, and base locations). Also, the U.S. would be at a disadvantage since China would find itself at the center of the theater. The U.S. would have limited options for establishing bases and air-fields. Even then, these would be

Exploitation," *U.S.-China Economic and Security Review Commission* (2009): 3-15.

⁵⁰ Sophie Beach, "China Denies Hacking Congressional Computers," *China Digital Times*, June 12, 2008, final edition, <http://chinadigitaltimes.net/2008/06/china-denies-hacking-congressional-computers/> (Accessed October 31, 2013).

⁵¹ Bryan Krekel, "Capability of the People's Republic of China to Conduct Cyber Warfare and Computer Network Exploitation," *U.S.-China Economic and Security Review Commission* (2009): 68-74.

⁵² Infosec Island, *Chinese Military Advocates Cyber Offensive Capability* <http://infosecisland.com/blogview/21194-Chinese-Military-Advocates-Cyber-Offensive-Capability.html> (Accessed April 15, 2013).

⁵³ Bruce W. MacDonald, *China, Space Weapons, and U.S. Security* (Washington, D.C.: Council on Foreign Relations, 2008), 3-11.

vulnerable to conventional attacks (e.g. missiles) or asymmetric attacks (e.g. jams, disruptions, blindness, or destruction of C4ISR). It is also important to point out that in such an event, China could have access to landlines, high power line-of-sight communications, advanced planning, and the PLA's intimate knowledge of physiographic barriers, terrain, and maritime lanes.⁵⁴

Conclusion

China has made remarkable achievements in its DIME capabilities since the Deng Xiaoping era. The tentacles of Chinese diplomacy reach every corner of the world, and they will continue to do so as long as China remains a top actor in international governmental organizations and a prime stakeholder in global commercial ventures. China has been pressing for a multipolar world order and has tactfully modeled its domestic and foreign policy to carry out its comprehensive national agenda. Such a task has prompted the CCP to advance its I&M capabilities, evident by the massive amounts of funding allocated to improving the accessibility and rigor of educational programs.

As far as military doctrine is concerned, "China is against the Ballistic Missile Defense (BMD) and Theatre Missile Defense (TMD) programs of the United States. China believes that [these programs] will give the U.S. the ability to carry out a first strike on China and that [China will] not be able to inflict damage on the U.S. by its left-over weapons, as BMD would limit the damage on the U.S. In order to preserve its deterrence policy, China is trying to build more missiles, develop Multiple Independently Targetable Re-entry Vehicle technology, Anti-Satellite weapons, etc... so as to counter the U.S. BMD program."⁵⁵ Because of this, China's 2008 military budget quadrupled since 1997 to 58.8 Billion USD; it has used the funds to modernize its software and hardware defense forces. A U.S. unclassified report stated that China's military power in 2008 had "the most active missile program in the world" and was "developing and testing offensive missiles forming additional missile units, qualitatively upgrading certain missile systems and developing methods to counter ballistic missiles defense."⁵⁶

Besides China's advancements in missile programs, it is important to focus on China's progress in space and cyber weapons. In January 2007, China was successful carrying out an anti-satellite test that consisted of a direct-asset kill vehicle making a direct hit against a target satellite that was traveling at 7.42 meters per second. This was a clear demonstration of China's emerging space capabilities.⁵⁷ It is imperative to note that China's information warfare capabilities are directly linked to its space capabilities; hence, progress in the space realm correlates to progress in the cyber domain. As one may note from the previous section, the list of Chinese network attacks suggests the Chinese are actually successful cyber-warriors. The trend is likely to continue, especially considering the current air defense identification zone.

⁵⁴ Ibid.

⁵⁵ Kumar, 37-53.

⁵⁶ Robert S. Norris and Hans Kristensen. *Chinese Nuclear Forces: The Bulletin of Atomic Scientists*. <http://thebulletin.metapress.com/content/25094v7235832574/fulltext.pdf>, as cited in Neha Kumar. "Engaging China's Nuclear and Missile Threat." *India Quarterly: A Journal of International Affairs* 65, no. 37 (2009): 37-53. doi: 10.1177/097492840906500104 (Accessed September 12, 2012).

⁵⁷ Christopher Griffin and Joseph Lin. China's Space Ambitions. *Armed Forces Journal*. 2008. <http://www.afji.com/2008/04/3406827>. as cited in Neha Kumar. "Engaging China's Nuclear and Missile Threat." *India Quarterly: A Journal of International Affairs* 65, no. 37 (2009): 37-53. doi: 10.1177/097492840906500104 (Accessed September 12, 2012).

Structured Analytic Technique I: Brainstorming

Focal Question: How does the expansion and improvement of Chinese I&M capabilities affect American hegemony (influence or destabilize U.S. authority) in the Asia-Pacific region?

Brainstorming helped identify and examine the driving forces and pertinent variables (e.g. political history, previous and ongoing conflicts in the region, the status of Taiwan, Chinese economic power and its leverage in international relations, Chinese advancements in scientific research and development, and energy security) associated with the expansion of Chinese I&M capabilities and its effects on U.S. authority in Asia-Pacific. The ideas and findings were arranged into logical categories;⁵⁸ particularly, the DIME was explored and added emphasis was placed on ‘Information’ and ‘Military.’ New ideas, concepts, and scenarios emerged despite the fact that some were improbable, unconventional, and perhaps even bizarre. Had the structured brainstorming technique not been used, the stimulus for creativity would have been limited as I would not have been able to bounce ideas off previous thoughts. Moreover, this exercise helped me identify the paradigm (constructivism, liberal-institutionalism, or realism) that dominates my line of thought. Since the time frame had not been decided at this early stage, using a cross-impact matrix would not have been practical. The importance of each idea was based on the time frame the analysis would cover (e.g. immediate future, intermediate future, or long-term future). In this particular case, the time-frame shall span five years from the present date.

Structured Analytic Technique II: Starbursting & Initial Assumptions

1. **Who:** Can one assume to know who all the key players are?

The major players are the U.S. and the PRC.

2. **What:** Can one assume to know the goals of the key players?

Chinese Goals: In a diplomatic sense, the goals of the Chinese are to tip the power scale in China’s favor; to exercise coercive diplomacy; to force the U.S. to make concessions against its will; and perhaps to adopt a policy of brinkmanship to solve the Taiwan issue. In terms of I&M capabilities, the Chinese may be seeking to promote their advancements in scientific research and development; to challenge the U.S. scientific community; to boost nationalism; to enhance the security of the state; and to amplify their deterrence capabilities against the U.S.

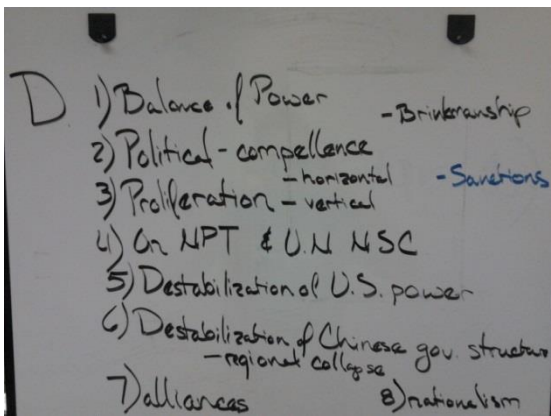


Image 1. Ideas under the Diplomacy (D)

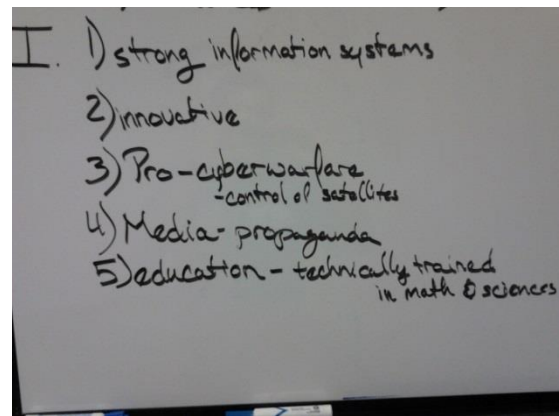


Image 2. Ideas under the Information (I)

⁵⁸ Richards J. Heuer Jr. and Randolph H. Pherson, *Structured Analytic Techniques for Intelligence Analysis* (Washington, D.C.: CQ Press, 2010), 31.

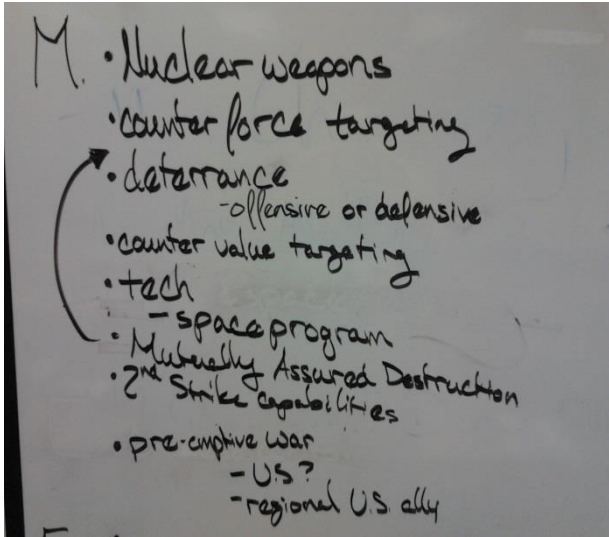


Image 3. Ideas under the Military (M)

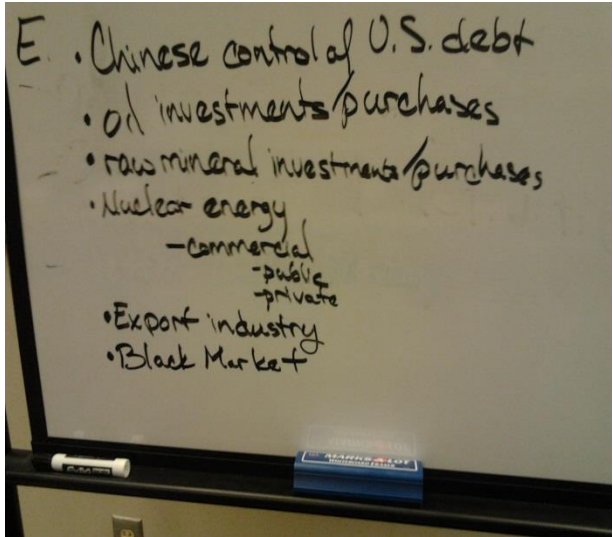


Image 4. Ideas under the Economics (E)

U.S. Goals: The diplomatic goals of the U.S. are to maintain the status quo; to force China to back off from the Taiwan conflict; and to assert U.S. authority and influence in the region. In terms of I&M, the U.S. seeks to maintain superiority in scientific research and development; to enhance its own security and regional bases; to lessen the probabilities of vertical and horizontal I&M proliferation; and to guarantee American military dominance in the region by asserting its unrivaled military complexes.

Foreign Policy Objectives	U.S.	China
National security	Yes	Yes
Deterrence	Yes	Not sure
Regional stability	Yes	Yes

3. **When:** How fluid are international agreements in the region? Will they change in the foreseeable future?

Circumstances have changed over the past two decades. First, China’s accession to the World Trade Organization in 2001 marked its formal entry to the world economy. Until 2007, its economy enjoyed an average of approximately 10 percent annual growth. Then, the 2008 global financial recession decreased that growth. The recession served as a “wake up call;” the Chinese government must strive to become more self-sufficient. As a result, the status quo may change over the next five years as China takes increasing opportunities to exert influence on its neighbors. On this note, enhancing its I&M capabilities is a top priority as it complements its DIME. Moreover, China is a declared U.S. ally on the war on terrorism and it has even arbitrated Six Party Talks, but it has been acting belligerent when it comes to the air defense identification zone.

4. **Where:** Can one assert where the real action may take place?

The action is going to take place in the Asia-Pacific region.

Real action	China	U.S.
Military	Land: Infantry; artillery; missile technology; possible use of nuclear capabilities. Sea: Naval fleet. Air: "Catching up."	Land: Same capabilities but fewer personnel. Sea: More advanced; indigenous tech. Air: Superior stealth and airpower.
Information	Information Warfare: Hacking and disrupting Western information systems that use computer technology; Cyber-warfare: Attacks may range from jamming C4ISR satellites, to blinding them, or even to outright destroying them	Information Warfare: Improving defensive cyber measures. Cyber-warfare: Same capabilities but more restricted doctrine.
Economic	U.S. Debt: China holds a substantial portion of U.S. debt Exports: China exports the world's products Bootlegging costs millions of USD to U.S. companies	U.S. Debt: U.S. concerned that China could destabilize its currency. Chinese Imports: U.S. can destabilize China's economy by imposing sanctions.

5. **Why:** Is it possible to understand the motives of the key players?

The motives of China are to boost nationalism, tip the power scale in its favor, increase its leverage in international relations, and to mitigate American influence in its neighborhood.

The motives of the U.S. are to maintain the international status quo, and to stay superior in terms of scientific research and development as well as military technology (e.g. C4ISR).

6. **How:** Can one know how the key players will act?

Courses of action are difficult to deduce since any factor within the DIME may alter motives (e.g. elections; trade agreements; environmental plans; intelligence operations; military exercises; belligerent threats from any key player or one of its allies). Nonetheless, China has a nuclear arsenal and it is improving its non-conventional military technologies (e.g. the 2007 anti-satellite weapon it tested on an ageing weather satellite). On this note, the U.S. will counter any Chinese power projection. The U.S. showed this determination as it responded to the 2007 anti-satellite weapon test with its own launch of a modified missile-defense interceptor in 2008. The message was "we can also shoot a bullet with a bullet."

Structured Analytic Technique III: Key Assumptions Check

It is important to note that both China and the U.S. underwent transitions in their administrations in 2012 (e.g. the Fifth Generation of Party-State leaders in China and the presidential elections in the U.S.). As a result, both countries' foreign policy objectives may change dramatically during each respective administration. In any case, a leadership analysis may clear the fog of the future.

It is also important to note that there are other strong powers in the region, some of which have considerable nuclear capabilities (e.g. Russia, India, Pakistan, and North Korea). Moreover, South Korea, Japan, and even Australia also have considerable influence in Asia-Pacific.

Aside from analyzing China's hard power in its international political strategy, it is also important to assess its soft power (e.g. cultural influence, widespread philosophies, no-strings-attached assistance programs to developing nations in Asia, and diplomatic contact with North Korea). Chinese soft power already has become an influential symbol in the region at the expense of the U.S. imposing its foreign policy objectives.

In terms of information capabilities, China may truly want to hone the next generation of computer scientists, engineers, and scholars. Nonetheless, information systems run the country's C4ISR; therefore, analysts must keep track of these research and policy developments. In regards to military capabilities, China may wish to adopt a counter-force targeting strategy, in which only an adversary's armed forces and arsenals are targeted. The objective behind this strategy would be to peacefully come to terms with the adversary. On the other hand, the Fifth Generation of Leaders can also adopt a counter-value targeting strategy. Such a doctrine would declare the intention to use advanced I&M on an adversary's most valued non-military resources (e.g. population centers, industries, critical infrastructure, and even historical landmarks). Lastly, China could be expanding its I&M capabilities only to protect its shipping lanes, energy and mineral extraction projects, personnel, and other interests abroad.

Additional assumptions regarding American goals are the following: (1) cutting back on the world's I&M arsenals; (2) enforcing international agreements and treaties; (3) prevent another era of Mutual Assured Destruction; (4) maintain superiority in scientific research and development; (5) deter and deflect computer-network attacks; (6) protect itself from a preemptive strike; (7) maintain superiority in defense and missile interception systems as well as first- and second-strike capabilities; and (8) prevent China from increasing its conventional and asymmetric I&M capabilities for the sake of cutting its own military expenditures.

Moreover, international relations are fluid and may drastically change over short time spans. Given China's involvement in Africa and Latin America, conflicts may not be limited to the Asia-Pacific region. Also, with the advent of new technologies, it may even be possible for the action to take place in outer space (e.g. correlation between missile technology, high-tech warfare systems, and the rapidly developing Chinese space program). It is also important to rethink alliances in the region. An attack on either country's allies may bring about political, economic, or even military action.

Structured Analytic Technique IV: Analysis of Competing Hypotheses

H1: China's economic and political influence can supersede the need for enhanced I&M and enable the PRC to peacefully become the regional hegemon in Asia-Pacific.

H2: China will use soft power to usurp U.S. influence in the region.

H3: China will destabilize the region by increasing its I&M capabilities and projecting belligerent intentions.

Evidence	H1	H2	H3
E1.China's media actively advocates for greater regional hegemony and counterbalancing the U.S.	+	+	+
E2.China has been strengthening its DIME since the 1970s, making it very difficult for regional key players to ignore its increasing strength, particularly in I&M.	+	-	+
E3.China's current economic status allows the PLA and Chinese intelligence services leeway into building their conventional and asymmetric weapons arsenals.	+	-	+

E4. China is countering U.S. efforts by holding annual summits with regional leaders; promoting economic cooperation; and brokering important political dialogue (e.g. the Six-Party Talks).	+	+	-
E6. China will follow steps to achieve victory: take early initiative; act pre-emptively in order to destroy chances of retaliation by the enemy.	+	-	+
E7. China has been open about its intentions to increase its military research and development as well as size of arsenals.	+	-	+
E8. China has become an active member of international economic institutions.	+	+	-

Legend: + consistent, - inconsistent, -- irrelevant

Structured Analytic Technique V: Devil's Advocacy Exercise

Challenged Hypothesis – H1: China's economic and political influence can supersede the need for enhanced I&M and enable the PRC to peacefully become the regional hegemon in Asia-Pacific.

Assumptions	Flaws in Logic	Weaknesses in Argument
The key players are China and the United States.	Assumption neglects powerful regional powers with strong economies, geostrategic location, nuclear capabilities or a combination of these (e.g. India, the Russian Federation, the Koreans, Japan, and Pakistan).	The development of China affects regional powers to the same extent as it affects U.S. presence in Asia-Pacific. Its development forces neighboring countries to reconsider their stance over conflict-prone zones (e.g. East and South China Seas, Tibet, Kashmir, Korea, Taiwan) as well as their relations with China, the U.S., and each other.
The goal of China is to destabilize U.S. authority through its increasing economic, political and military might.	Negative mental model dominated by a Realist paradigm, which is based on 3 critical assumptions: (1) the international system is anarchic; (2) states are self-serving rational actors; (3) states seek to ensure their survival by increasing their military capabilities.	U.S. and China attend the Asia-Pacific Economic Cooperation forum in response to the growing interdependence of the American and Asian economies. The U.S. Pacific Command (PACOM) has engaged in multilateral exercises with Asian militaries and governments since at least the Clinton administration. Robert Gates, former Secretary of Defense, attended the ASEAN Defense Ministers Meeting –Plus in Hanoi to foster cooperation on military and security related issues, including but not limited to nuclear counter-proliferation, counterterrorism, countering transnational crime and corruption, and disaster relief.
The Chinese economy will continue to grow.	The Chinese economy is not independent of the performance of the global economy. The Chinese are finding themselves in a very difficult trade situation that affects	If the U.S. and Europe continue to suffer major economic setbacks, the Chinese economy will suffer extensively given China's reliance on foreign direct investment, cash

	the future of their economic output and growth.	reserves based on foreign monetary instruments (primarily the U.S. dollar), and manufacturing enterprises. Countries may not be able to repay their debts to China and therefore default on loans.
China's consistently improving economic performance yields greater political influence and thirst for military power.	International political influence and military power are not mutually exclusive. Military power is also gained through expertise and prowess; there is no clear present example that the Chinese are at this level. In regards to political influence, it is very difficult to gauge how other nations are influenced by other nations because each nation reacts differently to different situations.	China has been significant in military terms long before the "Four Modernizations" era shifted the country from a command economy to a market-oriented economy (e.g. it successfully tested a nuclear device in 1964 and launched the national space program with the arrival of Qian Xuesen from the United States in 1955). In terms of political influence, China has been an international leader for years through its involvement with the International Monetary Fund, World Trade Organization, World Health Organization, ASEAN Plus Three, the Shanghai Cooperation Organization, the United Nations, and the Six Party Talks. It has also been a key member of multiple international treaties such as the Nuclear Non-Proliferation Treaty and the Outer Space Treaty.
The real action is going to take place in Asia-Pacific.	Borders are more symbolic than ever before given the platform in which international relations are conducted. There is also no way of knowing where a conflict could take place (i.e. Cold War proxy wars).	China has ventured into Africa, Central Asia and the Middle East, and Latin America in search of raw materials and energy sources. The U.S. has vested interests in these regions as well. Therefore, the action can take place anywhere in the world.
China is willing to use or threaten to use nuclear capabilities for the purpose of advancing its agenda.	China's nuclear stockpile and defense expenditures are small in comparison to that of the U.S. It is also impossible to tell whether the Chinese will finally use their stockpiled capabilities. One of their proposed reasons is to provide another means of renewable energy.	Chinese nuclear policy is based on "minimum deterrence" – a no first use approach. U.S. defense expenditures totaled \$536 billion USD in 2006 versus China's \$122 billion USD. The People's Liberation Army has decreased in size from 4.5 million active and reserve personnel in 1980 to 2.9 million active and reserve in 2008.
China is internally stable and focusing exclusively on foreign affairs.	Chinese economic performance is only an indicator of domestic stability.	Chinese economic growth has compromised the environment as well as political and social stability. China faces tough domestic challenges ahead, including: receding water supply; water contamination and air pollution; land degradation, deforestation, and desertification; pandemics such as

		severe acute respiratory syndrome or the avian flu; hazardous waste management; underrepresented ethnic minorities in Guangxi, Tibet, Xinjiang, Ningxia, and Inner Mongolia; waning food supply and rise in food prices; increased reliance on foreign natural resources including energy; urbanization and a growing consumer-middle class; poor healthcare; low official membership in the Chinese Communist Party; the need to invest in the people – finance, education and training, real estate, entertainment industries, and tourism; protests by ethnic minority groups and those who possess ideological differences; human rights abuses and violent suppression of political movements; internal corruption.
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Why a Red Team Analysis?

Authoritarian leaders and small, cohesive groups are typical candidates for this type of analysis. Nonetheless, the chances of making an accurate forecast about an adversary’s decisions are significantly lower when the decision is constrained by a legislature or influenced by conflicting interest groups.

I understand that China is a one-party state and that supreme power is exercised by 7 members of the Standing Committee of the Politburo of the Communist Party (number of members was reduced from 9 to 7 during the most recent power transition). Given that the Politburo is a small group that shares positions in the State Council, National People’s Congress and in the Military Commission, a Red Team Analysis is feasible. In any case, one must be cognizant of the limitations of the analysis: lack of linguistic and cultural expertise, the danger of mirror-imaging, and of course, the fog of the future. Upon finishing the analysis, I find that I&M capabilities, particularly space-based and cyber capabilities, have the potential to challenge American hegemony in Asia-Pacific. It may be possible for assailants to cover their tracks and to set back the adversary’s military several decades.

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