

# GEOTHINKING LIKE THE CHINESE: A POTENTIAL EXPLANATION OF CHINA'S GEOSTRATEGY

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As China's perceived national interests and strategic orientations continue to develop, it is important to understand how China's strategic thought process differs from that of the United States. For the United States strategic thinking is dominated by the concepts of ends, ways and means. China's strategic thinking consists of three components: *shi*, stratagems, and an objective-subjective thought process. These components play an important role in helping China determine strategic targets and in manipulating historical, geographical, economical, military and political issues in order to achieve its strategic objectives.

## INTRODUCTION

Strategy formulators can only understand things and carry out innovative practical activities against the background of a specific social, historical, and cultural environment and tradition...understanding the adversary's ideological culture and strategic thinking method is as important as finding out the adversary's military deployment.<sup>1</sup>—Li Jijun, Chinese strategy expert and former Deputy Commandant of the Academy of Military Sciences

China's number of perceived "national interests" and strategic orientations continue to grow. Internationally they can be found in new initiatives to develop the Panama Canal; in developing the cyber infrastructure or oil fields of Africa; in dominating the business environment of Singapore; in exploring more arms sales with Venezuela; or in the exploration of space, the new "high ground" (along with the cyber or information domain) in China's estimation. Closer to home, China's focus remains fixed on the geographic entities of the South China Sea, Taiwan, and contested parts of India. There are varying reasons for these interests, some internal (social stability), some external (new avenues for commerce or energy supplies), and some that are both (national security concerns).

The strategic thought process behind these geographical focal points is unlike those utilized in the United States and other areas of the West, where the concept of ends, ways, and means dominates much of our understanding of strategy. China's strategic thought process is different. It is by design and history much more comprehensive and diverse. More importantly, underlying this evolved concept of strategy are three components or subthemes: *shi*, stratagems, and an objective-subjective thought process, all of which receive scant attention in the West in reference to "strategy." *Shi* refers to the attainment of a strategic

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\* The views expressed in this report are those of the author and do not necessarily represent the official policy or position of the Department of the Army, Department of Defense, or the U.S. government.

advantage over an opponent; a stratagem is a Chinese historical proclivity designed to mislead an opponent's perception and thinking processes; and the objective-subjective thought process has two aspects. First, objective reality refers to material things. Second, subjective thought refers to the ability to manipulate objective reality. They are considered as a whole. It is postulated here that these components play an important role in helping China determine strategic targets and in manipulating historical, geographical, economical, military, and political issues in order to achieve strategic objectives.

This paper initially defines these components in more detail. The explanation is descriptive and meant to be thought-provoking. It is not proposed here that they represent a definitive solution to understanding Chinese geostrategy, but rather that they offer alternate methods through which to examine Chinese strategy (and better develop counters to confront China's strategic moves). In this sense the analysis follows Li Jijun's advice that "understanding the adversary's ideological culture and strategic thinking method is as important as finding out the adversary's military deployment." Both military and civilian journals are used in the analysis, while mostly military journals are used for defining strategy and its subcomponents.

After defining China's strategic components the paper then proceeds to look at China's concept of national interests (and their protection and advancement) and China's concept of the objective environment (instead of the "operational environment" descriptor of the US military). Finally, the paper uses the strategic definitions and focus on national interests and objective reality to better understand some potential Chinese strategic guidance. China's external and internal strategic resource strategy is based on its needs and capabilities. Two truncated case studies are considered: the nation's external need for oil (focusing on oil interests in Africa and its transport through the South China Sea) and China's internal abundant supply of rare-earth elements. The geostrategies associated with these external and internal strategic resources are quite different. The paper concludes with an assessment of China's needs and capabilities versus the resource strategy it has developed. In short, the conclusion is an assessment of China's geostrategic plan.

This analysis doesn't portend to look at Chinese strategic policy, decision-making, military planning, and so on through "blue" glasses, i.e., templating these processes via US patterns. Rather, this is an attempt to get into the Chinese mind-set. The emphasis is on presenting these processes through the prism of Chinese thought as closely as possible from Chinese, not US, open-source materials. For that reason, more time is spent on defining terms for the reader. Finally, several terms are highlighted in **bold** throughout the paper so that readers are able to recognize and find new authors and dates quickly and chronologically as well as follow the thought processes associated with geostrategic issues.

## DEFINING GEOSTRATEGY

Chinese senior captain **Xu Qi**, a deputy director of the Strategic Research Office of the Navy's Military Academic Research Institute at the time his article appeared in **2004** in *China Military Science*, offered a definition and description of geostrategy. He wrote that geostrategy is "the state's strategy for seeking and safeguarding national interests in the realm of foreign relations."<sup>2</sup> Further he noted that geostrategy makes "use of geopolitical relations and the rules governing such relations in the international realm" and takes "state-to-state geopolitical relations as the object of research, such geopolitical elements as the geographical position, the comprehensive national strength, and the distance in space..."<sup>3</sup> "Distance in space" issues refer to the fact that interests decrease when space increases while the shorter the space distance, the more serious the threat to national interests. Geopolitical factors and the geographical factor are the two basic elements of geostrategy in Xu's opinion. The former is changeable while the latter, due to environment and position, is more stable.

After the early exploration period of the 15<sup>th</sup> century China closed off its borders to the outside world. Survival became rooted in control of land space and not the sea. As a result geostrategic thought ignored the sea for years. In many ways this was understandable since there were no sea powers that threatened China. For the mainland, the seas along its extensive border served as a shield and guardian of the mainland. Today, there is a historic opportunity for China to develop its maritime geostrategy due to the extensive change in the international situation after 9/11 focusing on integration and to new maritime geo-security threats to China's coastal areas.<sup>4</sup> Xu notes that "for China, a country with the greatest population in the world and with relatively scarce resources, the seas provide the most important strategic space for the country's sustainable development and also represent the strategic substitute zone of its land resources."<sup>5</sup> The seas will promote China's future development and the Navy must develop its capabilities to defend the nation's sea territory. With regard to defending national interests in the information-age, Xu wrote:

The use of informationized advanced weapons, space weapons, and new concept weapons will make it possible to launch multi-dimensional precision attacks from a broad scope stretching from the first island chain to the high seas, thus threatening the important political, economic, and military targets in the deep strategic rear areas. As threats to maritime security will come from the distant open seas, the Navy is required to broaden its vision to the open seas, develop its attack force for fighting in exterior lines, and set up necessary shields for the long-term development of national interests.<sup>6</sup>

Xu adds that marine space, air space, and outer space, also known as grand strategic or public space, belongs to no country. International waters, according to his calculations, occupy 64 percent of the total oceanic space on earth. China aims to take part in the management and protection of the resources therein. Interestingly, he states that China "has extensive national interests in the 'international waters' and the 'international voyage straits.'" This is based on transportation routes and the fact that China is the

fifth largest investor in the international seafloor zone. National interests will extend to all parts of the world's marine space where China's economy is involved. This requires naval safeguards of such interests.<sup>7</sup>

China's geographic location is in a part of the world where the geostrategic interests of many of the world's big powers collide. Each nation has a different method for solving its interests and the path it takes is reflected in its national security strategy. While not defining geostrategy directly, one authoritative Chinese military reference book states that a geostrategic relationship between states means "strategic relations relevant to the interests between related states formed on the basis of national geography and geocircumstances, such as geopolitical relationships, geomilitary relationships, and so on. These relationships play a basic role in national security and development and are important elements to influence and restrict war and strategy."<sup>8</sup> Two classes of elements make up a geostrategic relationship: natural geographic elements (a state's geographic position, size and shape of its territory, natural resources, capital, national frontiers, and boundaries, etc.); and a state's comprehensive power of economy, science, and technology; culture and the military; the organic structure and distribution of manpower resources; the structure of nationalities, religions, and social forces; a state's position of its role in the international community; and the characteristics of its foreign policy, among other issues.<sup>9</sup>

Natural resources (in the case of this paper, strategic resources) are a focal point of the analysis. These resources are the **objective** conditions on which the existence and development of a state depend. They include regenerative resources (land, water, biology, etc.) and non-regenerative resources (mineral resources, fuel, etc.).<sup>10</sup> This paper focuses on the latter area.

## DEFINING STRATEGY

Strategy remains an area of intense focus, most likely due to its long historical roots as a Chinese tradition. Today, the topic is often discussed in military journals. For example, in the 2009-2010 issues of the journal *China Military Science*, an important People's Liberation Army (PLA) publication, there were twenty-two articles focused on strategic concepts, a concentrated focus unlikely to be found in US journals (see Appendix One for a list of these articles).

The best single work on Chinese strategy, in this author's opinion, is the **2001** Chinese book *The Science of Military Strategy*. It is an excellent treatise on the Chinese concept of strategy and all of its inherent elements. Authors **Peng Guangqian** and **Yao Youzhi**, long considered experts in their field, defined military strategy in the following manner:

Strategy in China's new period takes national comprehensive power as its foundation, the thought of active defense as its guidance, and winning local war under high-tech conditions as its basic point to construct and exercise military strength; it carries out the overall and whole-course operation and guidance of war preparations and war for the purpose of protecting national sovereignty and security.<sup>11</sup>

Absent from this official definition is any mention of the **objective-subjective** thought process, stratagems, and *shi*. It includes a holistic view of “China’s new period” and stresses two of China’s core interests: sovereignty and security. Another work, the *Chinese Military Encyclopedia*, also ignores the subcomponents of strategy, defining it as:

The general plans for planning and directing war situations as a whole. That is, based on analysis and assessment of the international situation and the various political, military, economic, scientific, technological, and geographical factors of the two hostile parties, scientifically calculating the occurrence of war and its development, formulating strategic policies, strategic principles, and strategic plans, planning war preparations, and all of the principles and methods followed while directing the implementation of war.

This definition discusses planning and directing a war effort based on an assessment of the situation and an analysis of various factors. It concludes by stating that one must calculate war’s probability and formulate the principles used to direct war’s implementation.

These two definitions are radically different from one another. The first appears to be more contemporary and focuses on comprehensive national power and war preparations under information conditions. The second definition focuses on planning and directing war from strategy’s more historical vantage point. However, if neither mentions the **objective-subjective**, **stratagem**, and *shi* processes, then why are they the focal points of this paper? What do they have to do with strategy? The answer is that the **objective-subjective** thought process and **stratagems** suggest the HOW behind comprehensive national power and the planning process, while attaining *shi* accomplishes one of the actual primary goals of strategy. All three processes are imbedded in Chinese planning implicitly much as empirical thinking is imbedded in the thought processes of some Western countries.

## AN OVERVIEW OF THE PROCESS

From an outsider’s perspective there appears to be a few steps involved in developing strategic concepts and making decisions. The process starts with a comprehensive overview of **objective** reality. The threats, geographical conditions (resources, passages, borders, etc.), needs and excesses, levels of spending on defense and research in a nation, and so on are the elements of **objective** reality, the concrete things or material stuff of the contemporary environment. From **objective** reality, **core interests** are determined, as well as the major and general interests of the nation.

The game of strategy begins to evolve as nations decide which interests become requirements for the nation’s survival. It follows that the ways to “get what you want” are manifested as strategic guidance (**stratagems**). The goal is to achieve a strategic advantage (*shi*) of some kind that can be exploited now or in the future. The process involved with gaining a strategic advantage is sometimes referred to as the **subjective** thought process. It involves finding ways to manipulate **objective** reality to one’s benefit. The **subjective** thought process can utilize **stratagems** in the search for attaining strategic advantage or *shi*.

Conditions are changing constantly in the information age. These changes may be the result of fast scientific and technological changes, issues of globalization, or pure web influence. **Objective** reality, **subjective** methods of manipulation, and the utilization of change and new knowledge are the major elements involved in determining a nation's risk-taking calculus. Risks may be taken at crucial points if the elements indicate success. Or risks may be taken that allow for the use of certainty or even uncertainty (for example, when uncertainty is used as a component of deterrence theory). The application of these thought processes results in change through strategic guidance.

### **The Objective-Subjective Thought Process**

Military strategy consists of planning and guidance for the situation of military struggles as a whole; it means taking an **objective** approach with **subjective** matters.<sup>12</sup>

Just what is meant by the objective-subjective thought process? The Chinese *Xinhua Cidian* (*Xinhua Dictionary*) states the following:

**Subjective refers to a person's thinking or understanding. Objective refers to the material world existing outside of a person's consciousness.** The relationship between subjective and objective is a dialectical unity. Objective does not rely on subjective and exists independently, it is the source of subjective, it determines subjective; subjective reflects objective, and actively reacts with objective, under certain conditions it determines the effect of objective. The objective world is constantly developing and changing, and a person's understanding must also accordingly develop and change. There are frequent contradictions between subjective and objective. Only through practicing constantly to overcome the contradictions between subjective and objective does subjective understanding accord with objective reality, and only then can the world be effectively changed. Idealism and mechanical materialism, and opportunism and adventurism, are all divided by subjective and objective and are characterized by the separation of understanding and practice.<sup>13</sup>

**Objective** thought refers to the reality one faces, the concrete factors that are to be considered. These include issues such as the level of science and technology in a nation, the nation's portion of the budget spent on defense, the location of its troops, and so on. **Subjective** thought refers to a policymakers' or commanders' ability to influence or manipulate objective factors for their benefit.

The issue of objective-subjective thinking dots **Peng** and **Yao's** work. The topic first appears in the section on the laws of strategic thinking. In this section of the book, the authors list five models of strategy. The very first model states that "strategic thinking can be divided into an **objective** strategic thinking model and a **subjective** strategic thinking model according to the character of thinking."<sup>14</sup> The second model notes that "strategic thinking can be divided into a closed strategic thinking model and an open strategic thinking model according to the degree of openness of the thinking."<sup>15</sup> The third model states "strategic thinking can be divided into a **stratagem** type strategic thinking model and a force type strategic thinking model according to different application of strength by strategic subject."<sup>16</sup> The fourth model notes that "strategic thinking can be divided into conservative strategic thinking and creative

strategic thinking according to the attitude of the thinking toward experience and tradition.”<sup>17</sup> The fifth and final model states that “strategic thinking can be divided into unitary strategic thinking and systematic strategic thinking according to the quality and scope of the thinking subjects’ knowledge.”<sup>18</sup> The recent Chinese focus on system of systems methodology over the past year and a half indicates that the fifth model has received an elevated status (see the author’s forthcoming “Is China Channeling Admiral Owens?” for a comprehensive overview of the system of systems discussion).

When discussing war strength, war potential, and the means to win war and secure military objectives, Peng and Yao reference a famous historical statement on the **objective-subjective** thought process. Mao, they note, stated that war is a contest in **subjective** ability between the commanders of the opposing armies in their struggle for superiority and for the initiative on the basis of material (**objective**) conditions such as military forces and financial resources.<sup>19</sup> When making strategic decisions, the HOW of strategy, Peng and Yao write that “All correct strategic decisions are products of the conformation of **subjective** knowledge to **objective** reality. Strategic decision, as a thinking and cognitive activity, is not made without foundation nor is it innate in the mind of the strategic conductor but is the reflection of the laws of the movement of war and the embodiment of laws of strategic thinking.”<sup>20</sup>

Decision-making consists of judgments about the strategic situation, a decision on the strategy to accept (a decision on strategic guidance), and a formulation of strategic plans from this.<sup>21</sup> The authors note that the artistic character of strategic guidance lies in its wise application of **stratagems**. **Stratagems** (discussed more deeply in the next section) and **subjectivity** are thus closely related.

**Subjective** ability (the contest between opposing commanders) refers to the use of **stratagems** by commanders to gain an advantage and superiority over an opponent. **Stratagems** are based on trickery or diverting an adversary’s attention to his detriment. **Stratagems** are one of the six characteristics of strategy, according to Peng and Yao. They note that

Strategic guidance means a competition of strategic wisdom and **stratagems** on the basis of certain physical strength. The artistic character of strategic guidance lies in its wise **stratagems**. Accordingly in strategic contest a strategic conductor’s **subjective** initiatives are highly expressed in his resourcefulness and decisiveness, circumspection and far-sightedness, flexibility and responsiveness, and surprise moves to defeat the enemy. Outstanding levels of **stratagem** can ignite an extraordinary energy from the national strength available and turn the passive to the active and transfer inferiority to superiority as to secure the objective of winning by a few and winning superiority by using inferiority.<sup>22</sup>

Beside stratagems, other characteristics of strategy are practice, politics, comprehensiveness, antagonism, and prediction.

The strategic material or **objective** base of China’s military strategy is “comprehensive national power.” **Objective** reality is based on actual military strength and power while **subjectivity** implies the

ability to manipulate reality (via **stratagems**, wisdom, and resourcefulness) to gain superiority of some type (psychological, situational, actual, etc.) and thus the initiative.

Peng and Yao also provided an overall view of strategy from a Marxist viewpoint:

The **objective** physical conditions of war determine the laws of war as well as the guiding laws of war. Although strategy manifests itself in a war conductor's activities of **subjective** guidance, it is by no means the war conductors' personal extemporaneous elaboration. Instead it is based on given **objective** physical conditions and restricted by a certain social mode of production and certain social conditions of history. Therefore, it is an important task for studies of the science of strategy to correctly analyze the **objective** elements having a bearing on war strategy and reveal their inherent connections with war strategy.<sup>23</sup>

**Wang Pufeng** wrote in **2004** on the topic of strategic thinking.<sup>24</sup> He stated that thinking and ideas are not the same thing. Thinking "refers to the process of using a certain method to carry out a reasonable understanding. Ideas are the results of the thinking process." Thinking places more stress on adhering to principles and methods and not on results. As the **objective** world constantly changes, so also does the strategic situation. Innovative approaches are required to handle unexpected changes. Innovative thinking, according to Wang, is:

The flashpoint of strategic thinking; it is the ladder for successful strategists; it is the concrete embodiment of the knowledge and talent of strategists; it is the light of the art of strategic thinking. It may be said that there are no strategists who have no innovative thinking.<sup>25</sup>

Wang then asks "Does the obliquity in strategic developments have innovative strategic thinking as its **subjective** driving force?" It appears the answer to that question is "yes." The main body of strategic thinking is composed of expert knowledge of the situation, knowledge gained from experience and study, and outstanding ability (wisdom and knowledge) and sagacity (strategic planning and management). The latter two are the essential elements of strategic thinking in Wang's view.<sup>26</sup>

**Zhang Shiping**, writing in **2007** in the journal *China Military Science* about the nature and characteristics of strategy, noted that major issues in politics, the economy, culture, and society are called policy, while major issues in military fields are called strategy. He listed factors that could be considered as **objective** to include "armed forces building, defense works, manufacturing and storing military equipment and military goods, war mobilizations, determining basic operational orientation, differentiating theaters of operations, and formulating combat policies and principles of combat guidance."<sup>27</sup>

Zhang listed what he considered as the "**objective** formal characteristics" of strategy:

- Strategy is a historical category
- Strategy has a hierarchical nature. Major categories are international, grand, national, national security, and national military strategy. Minor ones are combat, military service, theater of operations strategy, and so on. National strategy includes war



preparations and war implementation, categories that national security organizations consider.

- Strategy's substance changes during different periods of time and at different levels. Today, national strategy and military strategy are the central considerations.<sup>28</sup>

After listing these objective issues, Zhang discussed **cognitive** (subjective) methods. He wrote that “policies, strategic guidelines, and **stratagem** are closely related to strategy.”<sup>29</sup> He states that “strategy is a matter of the objectives, general guidelines, policies, and principles related to national security, war preparations, and war implementation; and a **stratagem** is a scheme or tactic used in the methods and measures for strategic planning and strategic practices.” Strategic guidelines, he adds, can include concepts such as “lure the enemy in deep” or “active defense.”<sup>30</sup>

A **2007** book, *On Military Strategy*, explained the Chinese concept of strategy.<sup>31</sup> The book describes the military strategy concept and its components. Included in the explanation were characteristics, missions, the **objective** environment, planning, management, war direction and control, guiding ideology, and war mobilization. The book provides several hints as to how to conduct strategic analysis as well.

The authors write that military strategy consists of three elements: strategic objectives and strategic missions; strategic policy; and strategic measures. Strategic objectives are methods in pursuit of political goals while strategic missions are problems that must be resolved through military struggles. Objectives and missions change according to different stages in history. Strategic policy provides the basic approach for fulfilling the missions and realizing the objectives. It is a scientifically formulated strategic policy developed by the Central Military Commission. Strategic measures represent the general term for military force and the methods for achieving missions and objectives. They are the methods for **subjectively** guiding and unleashing the material force. **Objective** realities are enhanced through relevance, flexibility, and suitability.<sup>32</sup>

China's renewed interest in military strategy occurred after the 1980s. It resulted in a three-tiered system of national strategy, national military strategy, and the strategy of the services, theaters of operation, and logistics. The authors note that **objective** possibilities and **subjective** efforts are interconnected and blended together, giving military strategy a high degree of flexibility and diversity.<sup>33</sup> Military strategy has a political nature that determines its missions and tasks, an epochal nature in that these missions and tasks can change over time, and a guiding nature that selects the appropriate path, scale, and speed of development most beneficial to realizing national security interests of China.<sup>34</sup>

The issue of resourcefulness is of prime importance. Peng and Yao listed it as a sub-element of **stratagems**. The actual implementation of military strategy is expressed through choices in the use of opportunities, forms, and methods. This requires “strategic directors” to unleash **subjective** guidance, using strategy according to the situation and working to exploit adversarial traits. Successful strategies

require resourceful thought. This requires “agile ingenuity” and methods such as using different countermeasures to deal with different circumstances or using a variety of resources and plans to deal with complicated situations. Resourcefulness makes up for shortcomings in military strength and the technological levels of weapons and equipment.<sup>35</sup> Further, strategic planning is witnessing a combination of traditional resourcefulness and modern high-technology measures, making strategy more flexible, rich, and clever.<sup>36</sup>

Finally, in yet another example of the use of the **objective-subjective** thought process, author Senior Colonel **Luo Xiangde** from the Nanjing Army Command Academy wrote in **2010** that the strategic system of systems thinking for China is “a strategic thinking activity in which **subjective** ideas are manifested through **objective** realities.”<sup>37</sup> Thus, the concept is used quite often in military affairs when discussing strategy from a variety of perspectives.

### **Stratagems**

When US planners gather to make decisions for an upcoming operation, they generate courses of action (COA). A commander then examines his options and decides which course of action provides the best chance for success. Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, defines a course of action as:

Any sequence of activities that an individual or unit may follow. 2. A possible plan open to an individual or commander that would accomplish, or is related to the accomplishment of the mission. 3. The scheme adopted to accomplish a job or mission. 4. A line of conduct in an engagement. 5. A product of the Joint Operation Planning and Execution System concept development phase and the course-of-action determination steps of the joint operation planning process.<sup>38</sup>

When Chinese planners gather to make decisions, they consider the **objective** factors before them and then generate potential **stratagems** for use by commanders instead of COAs. A **stratagem** is a concept designed to mislead an enemy’s perception, thinking, and emotional processes. Its function is to fool an enemy force whereas a COA is designed to take advantage of a situation or, as the definition states, it is a scheme adopted to accomplish a mission. These definitions have been used for years but they differ in intent. The concept of manipulation appears to be inbred in a stratagem but not as clearly in a COA. However, Desert Storm COAs used the manipulation of reality (a fake marine landing before the “left hook”) so manipulation is not a lost art in the United States.

Today, one factor that COAs and **stratagems** share is a reliance on information technology (IT) components. Due to rapid advances in science and technology, the Chinese see IT as a valuable asset and feel that “the contents of the **stratagem** are continuously changing and renewing; the methods of **stratagem** are becoming more comprehensive; the space encompassed by the **stratagem** is multi-directional; and the technological content in **stratagem** methods are unique.”<sup>39</sup> **Stratagems** thus remain

an effective way of planning for engagements with an opponent and manipulating an opponent's reactions. For the US armed forces, IT offers ways to better integrate and coordinate COAs.

To win with **stratagem** in the information age the PLA believes that a strategist must link technology, strength, and **stratagem** to control victory. A good strategist is a good thinker who is innovative, creative, and flexible in his use of **stratagems**. A good **stratagem** performs a host of cognitive tricks, to include deceiving, controlling, inducing, arousing, creating, innovating, or manipulating another person or an entire staff.

**Zhang Xing Ye** and **Zhang Zhan Li**, the editors of the 2002 book *Campaign Stratagems* (a book published by China's National Defense University Printing House), note that "the side being in a strategically superior position, planning first and fighting later, winning through strategy, is able to fully promote high-tech superiority..."<sup>40</sup> A human's control over high-tech weapons and his or her ability to integrate weapons with **stratagems** makes one maximally effective.<sup>41</sup> The editors further state that in Chinese, *moulue* is **stratagem**, trick, and/or tactic. The concept is adaptable to decision-making, **subjective** initiative, and deception, and it is applicable to politics, the economy, international affairs, and military affairs.

**Li Qi** writes in the introduction to *Campaign Stratagems* that a campaign **stratagem** is when "the commanding officer, on the basis of certain strength, fully performs his **subjective** initiative, and manipulates and drives the enemy in the confrontation of intelligence, so as to create a situation that is favorable to his own troops but unfavorable to the enemy."<sup>42</sup> The transformation from static strength to operational efficiency requires the exploitation of friendly campaign strength, enemy campaign strength, and the campaign environment. This analysis is commonly referred to as uncovering *shi*, the sum of all the factors that impact on the performance of the respective operational efficiency of two sides in a general confrontational situation.<sup>43</sup> *Shi* is discussed in more detail in the next section.

A main element of campaign **stratagem** is the battle of wits. With action verbs such as manipulate, deceive, trick, and control, this is understandable. Editors Zhang and Zhang list three features of the battle. First is the competition of contradictory interests between two sides. Second is the manner in which decision-makers interact and attempt to influence one another. Knowing the decision-making process of one's opponent allows for the manipulation of that process. Third is the commander's personality and how he or she reacts under pressure in an uncertain environment. A study of hobbies, weaknesses, and flaws is "the best breach point for **stratagems**."<sup>44</sup> This implies that the Chinese conduct intense data-gathering on the personalities and interests of foreign commanders and leaders. For this paper, however, it is China's use of the stratagem battle of "competition of contradictory interests" that appears to be the most often noted by Chinese specialists.

There are three campaign **stratagem** methods. The first method is to “break up and unify,” changing the balance of static strengths of both sides in terms of time and space. The second method is to use special and regular forces, applying general concepts in irregular ways. The third method is to use deception and real actions (alternating between them). Integrating these three methods can improve chances of success. The editors periodically mention these three methods throughout the text. When applying these methods, creativity and flexibility become the soul of a campaign **stratagem’s** “battle of wits,” since **stratagems** are the primary means for the creation of a situation.<sup>45</sup>

Simultaneously, the weaknesses and limitations of an enemy’s high-tech equipment must be exploited.<sup>46</sup> The editors believe that differences exist among Chinese and foreign stratagem experts due to **objective** conditions, each nation’s operational environment, and various cultural and military heritages. Under various conditions the concept of risk, for example, would be treated differently. Zhang and Zhang note that the PLA stresses being active and steady, pursuing certain victory, engaging in prudent early engagement (cyber reconnaissance?), encouraging reasonable risk-taking, and avoiding unfavorable decisive battles. In the opinion of the editors, Western armies use common sense as the primary component of their **stratagem** thought process, along with systems theory, information theory, control theory, images, intuitional thinking, associative thinking, and psychology and behavioral science.<sup>47</sup>

Li Qi believes that the development of technology has opened up more avenues for the use of campaign **stratagems**.<sup>48</sup> Since the entire strategic depth is now open for exploitation, this creates more flexibility in target selection and the employment of **stratagems**. Engagement relationships are more complex due to the uncertain mix of symmetrical and asymmetrical operations.<sup>49</sup>

Li Qi writes that an understanding of “disposition” is crucial to **stratagem** application. This is similar to the concept of *shi* mentioned earlier. By disposition he is referring to force composition, battlefield environment, and campaign engagement methods. The concept of a force/superiority also has changed from concentrating forces such as troops and weapons to concentrating capabilities based on issues such as information mobility and long-range firepower. Capability superiority consists of the “mobile dispersal of entities (forces and weapons) and mobile concentration of capabilities.” As an example Li used the Kosovo conflict where forces were dispersed all over Europe, the United States, and space, yet operational capabilities were focused on an area to form theater superiority in what the United States termed “global force integration.” Long-range firepower and information mobility do not require the time or the infrastructure that ground troops require to concentrate assets on an area. It is also important to match a campaign **stratagem** with the overall political, economic, and diplomatic situation. Only when the stratagem matches the strategic situation can an enemy be convinced of an action.<sup>50</sup>

One section of *Campaign Stratagems* (perhaps the most important) is HOW to manipulate enemy commanders. The section opens by stating that not only high technologies, but also control theory,

information theory, psychological theory, organization and behavioral theories, and the methodology of systems engineering science are required to guide a campaign **stratagem's** planning and execution. This includes rationally selecting campaign objectives and, most important of all, deductively devising **stratagem** information to control the “intelligence-judgment-decision” process of the enemy.<sup>51</sup>

To deductively devise **stratagem** information requires the meticulous preparation of special information. An information developer's application of a **stratagem** requires the creation, transmission, receipt, and processing of information as the developer intends. **Stratagem** information is based on the development of specific information for different control targets. Some control targets require three things: supporting information to affirm the correctness of an enemy's judgment; interfering information of an independent or contradictory nature; and the blocking of key information concerning friendly intentions. One should alter enemy commanders' original judgments. They must be fed negative information, supporting information, and interfering information, and key information must be blocked.<sup>52</sup>

The developer of a stratagem must do everything possible to control the enemy's method of intelligence analysis and processing. This will put the stratagem developer in sync with the enemy's “intelligence-judgment-decision” process and induce the enemy to make decisions as one would expect him to do. The stratagem must consider the following points:

- Take into consideration an enemy's belief system, formed from knowledge structures, **subjective** leanings, method of thinking, and personality to meet concerns and needs and influence judgments.
- Take into account the enemy's decision-making organizational mechanisms. Anticipate distortions and insert redundancy of key information. Influence the basic characteristics of key individuals and links such as the intelligence processing procedures of the enemy.
- Take into account when sending out the first batch of **stratagem** information that it should be highly seductive and influential, followed by supporting information.
- Take into account political, superior/boss, and environmental pressures and their impact on decision-making.<sup>53</sup>

Transmission channels must be carefully controlled. Those channels that China controls completely, partially, or not at all are called white, gray, and black respectively. If black channels uncover friendly **stratagems**, then the **stratagems** can be used against friendly forces. This is the worst of outcomes, to fall into a counter-**stratagem** trap. The use of white channels that the enemy considers as reliable is the best for transmitting information. Further,

We [China] must pay a lot of attention to the cultivation and development of reliable channels during peacetime so as to develop enemy trust in these channels and to transmit **stratagem** information during war time. Under high-tech conditions, a strong enemy tends to highly trust, and heavily rely on, high-tech intelligence reconnaissance means. Therefore we must pay close attention to the characteristics of the enemy's high-tech reconnaissance means and study effective deceptive measures.<sup>54</sup>

Invariably, Li adds, some **stratagem** information will be distorted or lost due to an inability to properly predict certain **subjective** or **objective** responses. As a result multiple channels must always be utilized. In addition, feedback channels must be established to monitor the success or failure of the **stratagem** and to avoid having a counter-**stratagem** developed by an enemy.

**Stratagems** use the scientific way of thinking, which is a way “to analyze, design, research, manage, and control such a complicated system and provide the most optimized ways and methods.”<sup>55</sup> It is first necessary to defeat an enemy by thinking and only later by action.<sup>56</sup> Simultaneously, what is termed “psychological position exchange” must be accomplished. This means making a parallel comparison with the opponent’s thought processes in order to imagine what he would do and think, that is, to put oneself in one’s opponent’s shoes.<sup>57</sup>

In **2010 Xue Guoan** wrote on the characteristics of China’s traditional strategic thought.<sup>58</sup> He appeared to focus more on cognitive aspects, to include soft power. Xue is an authoritative figure. He is the Deputy Director of the Department of Strategic Studies at National Defense University (NDU). The abstract that precedes his article notes the following:

This thinking embodies the following distinctive characteristics: overall integrity, long-term **stratagem**, the combination of military and non-military strategies, equal importance attached to **stratagem** and real strength, priority to soft tactics, and the principle of gaining mastery by striking only after the enemy has struck...on the other hand, however, this thinking has such shortcomings and deficiencies as over-emphasis on classics, little attention to innovation, over-emphasis to principles but overlooking the role of armament and ignorance of the importance of maritime power.<sup>59</sup>

Xue notes that even in ancient China, consideration was given to the overall situation, since Sun Tzu used five factors (the way, heaven, earth, command, and rules and regulations) when considering warfare. “The way” refers to political manipulation, a method that allows people to “think in line with their sovereign.” When considering the overall plan for war, it is necessary to take in the overall situation and use **stratagems** wisely in exploiting circumstances to one’s advantage.<sup>60</sup>

Xue chides Western strategists for their tendency to embrace power, only resorting to **stratagems** as a last resort. The Chinese, on the other hand, as an agricultural society, embrace the natural environment and geographical factors. Descriptions of how stratagems are devised are as important as details of battles in historical works, he notes. Xue states that devising **stratagems** at the strategic level is a focus of Chinese practice. There is emphasis on how **stratagem** can coordinate the overall situation, enabling limited military power to generate “immeasurable efficacy.” Another important aspect is to attach equal importance to stratagem and actual strength. Sun Tzu advocated winning by thwarting an adversary’s strategy and then by disrupting his alliances. By covertly reversing a power balance, one becomes stronger than one’s adversary. Controlling one’s use of power is thus paramount to success in soft tactics.

Using soft military power is reliant on building up one's latent military power and exhausting an adversary's overt power. Xue states that the key to using the strategy of soft military force is to apply "perfect stratagems to weaken one's adversary and maintain a low profile in developing one's national strength." Such a strategy is enhanced by a protracted war in which one strikes when the opportunity arises. One is reminded of Muhammad Ali's rope-a-dope tactic of waiting until his opponent exhausted himself by pounding away at Ali's covered up body. China advocates the same concept, switching to the offensive only after one's opponent has exhausted his power. However, Xue concludes with this advice: when a favorable opportunity for battle emerges, China must not stick to its moral concept of not firing first. Rather, China should use the opportunity to defeat an adversary in one move. Soft military power is equivalent to the strategy of active defense.

Modern warfare techniques showed that was not the case. A weakness was the overreliance on land power at the expense of sea power. Today, China is focusing much more attention on the latter. It is a key element of the country's geostrategy.

According to Zhang and Zhang, the PLA is developing institutions to prepare and monitor the use of **stratagems**. The PLA actively studies the analytical processes of foreign militaries to apply the proper **stratagem** techniques against them. Stratagem techniques enable the PLA to create a situation that is favorable to them. They are preparing for future "battles of wits" now in peacetime.

It is important that US national security personnel understand that these military capabilities can be applied to political, economic, and other fields of study. There may well be Chinese institutes in existence now that are involved in the study of campaign stratagems to manipulate US financial flows or to create other disruptive situations. The United States and its allies must prepare now for such eventualities.

### ***Shi***

Different Chinese and English speaking authors have translated ***shi*** as energy, power, momentum, and strategic advantage, among other translations. Why should this concept be of any concern? Noted Western Sinologist Roger Ames has called the concept of ***shi*** "the key and defining idea in Sun-Tzu: *The Art of Warfare*." Ames translates the term as "strategic advantage." He notes that ***shi*** "is a level of discourse through which one actively determines and cultivates the leverage and influence of one's particular place."<sup>61</sup> The popular Western Sinologist Ralph Sawyer defines this type of ***shi*** as the "strategic configuration of power."<sup>62</sup> ***Shi*** is the title of Chapter Five of Sun Tzu's *The Art of Warfare*.

The examination of ***shi*** that follows is based on different linguists' translations of the concept in *The Art of War*, on the views of experts on the topic, and on definitions from dictionaries or philosophical compendiums. The examination allows one to consider several linguistic variants of the term. The

concept is also examined from the contemporary context of what might be expected from the “strategic configuration of electrons” or from one of the other definitions of *shi*.

*Shi*<sup>63</sup> is a Chinese term that has eluded a precise Western definition. It is a concept familiar to the Chinese and foreign students of Chinese philosophy, such as US sinologists. But it is a concept hardly ever encountered by others not in these categories.

William H. Mott IV and Jae Chang Kim, authors of *The Philosophy of Chinese Military Culture: Shih vs. Li*, write that *shih* was the defining theme in *The Art of War* and that “the essence of *shih* was the dynamic power that emerged in the combination of men’s hearts, military weapons, and natural conditions.”<sup>64</sup> Thus, while the significance of *shi* is clear to major writers and translators, what is exactly meant by *shi* is not! Further, if these scholars consider *shi* to be the key and defining theme of the *Art of War*, then analysts should pay attention to the term and investigate why it is of such significance to these scholars and linguists.

Ralph Sawyer writes in his edited version of *The Seven Military Classics of Ancient China* that *shih* is “a measure of the relative power an army derives from positional advantage combined with its overall combat strength.” Positional advantage can include terrain, firepower, morale, superior provisions, and other force multipliers. The release of strategic power can vary, based on these many factors.<sup>65</sup> Roger Ames believes *shih* can be traced back to Legalist, Confucian, and even Taoist philosophical sources.<sup>66</sup> Dr. Michael Pillsbury, one of America’s foremost authorities on the PLA and author of several comprehensive works on Chinese military thought, used his study of PLA materials to uncover several components of *shi* that appear key to understanding the concept:

- *Shi* assesses your side’s potential, the enemy side’s potential, weather, and geography to identify the moment in a campaign when an advantage can be gained over an opponent. *Shi* is a certain moment in the campaign when you could take the advantage from the enemy (He Diqing, *Campaign Course Materials*, AMS 2001);
- *Shi* is created in five ways, through maneuver, posture, position, psychology, and calculations. The timing and speed of creating *shi* in war has changed under conditions of high-tech warfare (Yue Lan, “High Tech Warfare and Contemporary Military Philosophy,” *Liberation Army Daily Press*, 2000)
- *Shi* is the moment when it becomes apparent one side can win the war (Guo Shengwei, *Deng Xiaoping’s Military Stratagems*, Central Party School, 2000)
- *Shi* according to the Tang founder used psycho-*shi*, geo-*shi*, and shaping-*shi* (Zhang Wenru, *China’s Strategic Culture*, Beijing University Press, 1997);
- and *shi* can be created with stratagems (Li Bingyan, *Stratagem and Transformation*, 2004).<sup>67</sup>

Other definitions of *shi* by a host of Western sinology and Chinese experts are also available. Some of the more distinct Western definitions include the Denma Translation Group’s *The Art of War*, where *shih* is defined as the power inherent in a configuration;<sup>68</sup> Francois Jullien, author of *The Propensity of Things*, who defines *shi* as the potential that originates not in human initiative but instead



results from the very disposition of things;<sup>69</sup> William H. Mott IV and Jae Chang Kim, authors of *The Philosophy of Chinese Military Culture*, who define *shi* as the dynamic power that emerged in the combination of men's hearts, military weapons, and natural conditions;<sup>70</sup> and the *Military Power of the People's Republic of China*, 2007, written by a group of US authors, who define *shi* as the strategic configuration of power, also understood as the alignment of forces. There is no direct Western equivalent of the term, according to the report.<sup>71</sup>

There are a number of Chinese sources that define *shi*:

- The Chinese book *Campaign Stratagems* defines *shi* as situation, status, and state of affairs; the combination of the friendly situation, enemy situation, and the environment; trend in affairs; the integrated situation that has an impact on the effective performance of military strength; sum of all factors impacting the performance of the operational efficiency of both sides; general confrontational situation; hub of increase and decrease in operational efficiencies of two sides; the key factor determining the rise and fall of operational efficiency.<sup>72</sup>
- The *Chinese Encyclopedia of Philosophical Terms* explains it as “availing oneself of advantage to gain control, a natural interest,” while law is the basis for governing with *shi*. *Shi* “changes with each passing day and cannot return to its former self.”<sup>73</sup>
- **Tao Hanzhang**, a retired Chinese General, defines *shi* as “the strategically advantageous posture before a battle that enables it to have a flexible, mobile, and changeable position during a campaign.”<sup>74</sup>
- Chapter Five (*Shi*) in Tao's translation of *The Art of War* translates *shi* as “posture of the army.”<sup>75</sup>
- At the 6<sup>th</sup> International Symposium on Sun Tzu's *Art of War* **Li Rulong** explained *shi* as “acting according to the situation.” “Planning and concocting power” and “selecting men and employing strategic power” have always been important subjects for study by strategists throughout the ages. “Power” is actually a kind of potential energy; once the external condition is provided, this energy will demonstrate a mighty power and become a force. Such an understanding can be allied to all fields of social practice including military affairs.<sup>76</sup>
- The *Xinhua Zidian (New China Dictionary)* defined *shi* as power, authority, might (abuse one's power to take advantage of others); a condition that is manifested, appearance (pertaining to the natural world [physical features of a place, terrain, precipitous mountains], pertaining to movement [posture, gesture, sign, signal], pertaining to politics, military affairs, or other areas [current situation, trend of the times, the way things are going, general trend, take advantage of circumstances to attack a fleeting enemy]).<sup>77</sup>

Thus, the complexity of the term is clearly identifiable from the definitions. Posture of the army, strategic advantage, strategic configuration of power, the alignment of forces, availing oneself of advantage to gain control, potential from the disposition of things, momentum, energy, force, power, influence, and “holding forces with hands” were all used to define *shi*.

*Shi* as a situation or disposition appears to be a reflection of a conceptualization or historical thought process. These expressions and perceptions, when studied today, imply that the Chinese expressions and perceptions are more comprehensive and holistic than their Western counterparts. The

Chinese mind, it appears, has been taught by its philosophical and cultural base to first locate the disposition or setting of reality before focusing on a solution to an actual problem at hand.

As an example of this conceptualization, *The Geography of Thought* describes a simple experiment where people of Western and Oriental races look at fish in an aquarium and describe what they see. The first response from an Oriental's viewpoint was a description of the environment ("It looked like a pond") whereas the Western mind was three times as likely to first mention the type of fish they saw.<sup>78</sup> This indicates that the Oriental mind is taking in the big picture, the disposition of things. Likewise, this propensity to examine a broader disposition appears to be reflected in Chinese theorists' descriptions and definitions of strategy, which are broader than US descriptions of the concept. Whereas US strategists focus on ideas or ways, ends, and means, Chinese strategists tend to first look at objective factors existing in the world today with reference to a particular country (level of science and technology, amount spent on defense, location of forces, geo-political setting, etc.) and how to subjectively manipulate these circumstances. The Chinese examination of strategic resources and maritime passages may well utilize the same concepts.

It is Ames, however, who appears to understand the concept of *shi* best and what it means for the PLA today. He noted that:

All determinate situations can be turned to advantage. The able commander is able to create differentials and thus opportunities by manipulating his position and the position of the enemy. By developing a full understanding of those factors that define one's relationship with the enemy, and by actively controlling and shaping the situation so that the weaknesses of the enemy are exposed to one's acquired strength, one is able to ride the force of circumstances to victory.<sup>79</sup>

So, having explored the three components that describe how to do strategy, how are these concepts applied in conjunction with national interests in the geostrategic field?

## CHINESE NATIONAL INTERESTS

National interests "both **objectively** exist and are to a very great extent determined by **subjective** judgments."<sup>80</sup>

National interests open the second chapter ("Determinants of Strategy") of the **2005** English edition (Chinese original was written in 2001) of the book *The Science of Military Strategy*. Authors **Peng and Yao** state that strategy manifests itself in the war conductors' activities of **subjective** guidance. Further, strategy is based on given **objective** physical conditions that are restricted by social modes of production and conditions of history. Many **objective** physical conditions are manifested in the form of national interests.

National strategy is based on national interests with the latter serving as the start point for strategic guidance. A national interest is defined as "an aggregate of **objective** physical and spiritual

requirements on whose existence and development a state depends. National interest is the cardinal basis to determine the alignment of a state's military strategy as well as the starting point and also the destination of its national military strategic guidance."<sup>81</sup> Two national interest classes exist: **national interests of existence and national interests of development**. Interests include national territory, national security, national sovereignty, national development, national stability, and national dignity. National territory concerns resources and living space. National security includes information, energy, military affairs, and so on.<sup>82</sup> Sovereignty is a state's "inherent power to have legal supremacy internally and independence externally."<sup>83</sup> National stability refers to a state's maintenance of normalcy and orderliness, and national dignity is a state's deserved status and prestige in the international community.<sup>84</sup>

However, national development is perhaps the area where China's geostrategic interests are most prominently emphasized. This dynamic component refers to a state's economic prosperity, science and technology progress, and improvements in people's living standards. Thus, searches for new markets and for oil and gas would fit this aspect of national interests. Chinese living standards are measured against those of other nations and with past calculations of China's comprehensive national power, especially those measured on the basis of economic prosperity and overall national strength.<sup>85</sup> Some developmental national interests are fundamental while others are long-term. On occasion, China may find commonality or an antagonism of interests with a state. In the latter case, when compromise is not possible, war can break out.

Spearheading developmental interests in the field of strategic resources is the China Development Bank. This bank is directly responsible to the State Council of China and is China's only bank whose governor is a full minister. The bank uses energy-type loans to ensure that China's energy needs are met and resourced properly. Such loans help integrate government policies with private objectives, that is, companies make money while the government pursues its core and national interests. In any case, China Development Bank is an institute that should bear intense future scrutiny as a means for pursuing strategic resources. The bank likely will play a very important role in China's energy strategy.

Peng and Yao write that Chinese national interests are in conformity with the interest of the proletariat or general mass of people. A national interest must answer the question "what is to be protected or gained?"<sup>86</sup> From this analogy China's leaders rationalize efforts to attain oil and gas and other geostrategic resources "for the good of the masses." The focus of geostrategy, they write, should be on long-term interests instead of immediate ones. Today, however, China's leaders must focus on both long and short-term interests simultaneously.<sup>87</sup> It is important, therefore, to find China's core national interests because they will offer principal clues for the detection of geostrategic plans.

Major General **Ma Ping**, the Deputy Director of the Strategic Studies Department of NDU, wrote an excellent article in **2005** on national interests and strategy. Ma stated that national interests are the

starting point for strategic planning. Clearly defined national interests help determine objectives to defend and areas to keep under observation in case threats might emerge. National interests can also help sort out potential strategic partners and opponents. National interests can be divided into **core interests**, major interests, and general interests. **Core interests** are vital interests. They include sovereign independence, territorial integrity, system security, and non-endangerment of economic lifelines. A major interest includes the unimpeded channel for the acquisition and transport of resources overseas. This latter category could be the basis for China considering the South China Sea (a separate section on this area appears later in this paper) to be a core interest. Ma makes the case that major interests, due to contemporary conditions (i.e., China's need for oil), can migrate to the core interest category.<sup>88</sup> Over the past few months, in both open publications and in private conversations, the Chinese have stated that the South China Sea has now become a core interest. As Ma notes:

Our per capita resource reserve levels are low to begin with; with a population of 1.3 billion and growth rates in excess of 9%, reliance on domestic resources alone would make it difficult to support economic development, thus our dependence on foreign resources is constantly rising. At present, we depend on foreign sources for 40% of our oil. If we continue to grow at this rate, by 2010, that figure could reach 60%. Foreign dependence on other major mineral resources will also increase. By 2010, foreign dependence for iron, copper, and aluminum could reach 57%, 70%, and 80%, respectively. It can be said that the ability to securely obtain foreign resources has already begun to have lifeline significance for China's economic development.<sup>89</sup>

Ma notes that a nation must be militarily secure if it is going to be able to protect its national interests. A nation must be able to win wars it fights, form a strategic deterrent or counter-deterrent to an opponent's deterrence capabilities, and develop an advantage in forces or at least attain a balance of power with respect to one's opponents. These developments to ensure military security primarily are concerned with **core** and major interests.

Developments in this age of military transformations are also faced with severe challenges and strategic opportunities. One of the most important challenges that must be overcome is the ability to create advantageous situations (*shi*) on China's periphery when reacting to, reducing, or resolving external military pressures. Simultaneously, a strategic opportunity has presented itself to China in the fact that China can build up its military potential and thereby develop new capabilities in the absence of conflict.<sup>90</sup>

With regard to **stratagems**, Ma recommends using concepts such as "feigning" and "making noise" in order to allow opponents to sense one's deterrence capabilities and determination. An opponent must be made aware of one's actual strengths and determination to use them when necessary. The credibility of one's deterrence capability is important to develop as well as the mechanisms under which deterrence functions best and is brought to true effect. With the appropriate timing and means, military

deterrence can, in effect, “subdue the other army without fighting.”<sup>91</sup> At all times it is important to maintain flexibility, applicability, and initiative.<sup>92</sup>

In 2006 author **Wang Guifang** discussed in a general fashion a breakout of the topic of national interests, also in *China Military Science*. Wang wrote that preserving national interests is the explicit strategic objective of China’s general strategy and foreign policy. Security, he notes, is an **objective** condition in which the nation is free from danger, and, at the same time, it is a **subjective** feeling in people’s minds. Security has allowed China to become more **objective** and rational in understanding its national interests. For China national interests are the start point and purpose of the country’s national security strategy, whose core objective is economic development. Wang divides national interests into three levels: **core interests**, principal interests, and general interests. The description of each interest group correlates well with Ma’s description of **core**, major, and general interests. **Core interests**, Wang notes, require not only economic strength but also military strength. **Objectively**, however, there is a generation gap between China’s military strength and that of the world’s advanced nations.<sup>93</sup>

Wang writes that China’s national interests have become broader and now can be affected by the entire international situation. The nation must continuously reassess the importance and relevancy of these interests and also the policies of major powers toward China. An assessment of these policies leads China to formulate different policies in response. The most important responses are directed at the major powers and at the regional/peripheral geographical special environment around China, which has the most direct impact on its policies. Luckily the globalization process, in Wang’s opinion, has restricted the **objective** conditions for confrontation and, instead, opened a **strategic opportunity** for attaining interests through political and economic cooperative means. He implies the use of **stratagems** against major powers when he invokes the following resolve: update the rules of the game, adapt ourselves and learn the skill of implementing the competition mechanism, master the art of struggle, prudently make selections, prevent and mitigate possible crises, and achieve a new political balance. Further, do not fall into the trap of so-called “democracy.”<sup>94</sup>

Noted Chinese strategist **Li Jijun**, using the same publication in 2006, made several of the same points as the other authors. He noted that national interests are the starting point and objective of military strategic thinking and that the economy determines national interests. Strategic thinking, to Li, includes the processes of comparison, judgment, selection, decision-making, implementation, feedback, modification, summarization, and sublimation in the minds of those who command a war. He added that the ocean is the hope for China’s future development and the nation’s long-term interests; and that the confrontation of military strategies is not limited to the military domain but extends to the political, economic, scientific, technological, cultural, diplomatic and **resource domains** as well.<sup>95</sup>

Li used the **objective-subjective** and **stratagem** issues to buttress his arguments regarding strategic thinking. He stated that winning victories on an **objective** material foundation is stressed, while the outcome of a war is often determined by the **subjective** guiding capabilities of the two sides in a war. The **objective** conditions can change from the time before a plan is made to the time after which it is established. The **objective** condition must be continually monitored for its methodological significance if one is to resolve contradictions between it and **subjective** guidance.<sup>96</sup> Li then notes that the ancient Chinese emphasized the use of **stratagems** and that countermeasure-oriented thought today still utilizes **stratagems**. **Stratagems** require innovative thought. The latter is the negation of fixed models and conventions. It puts new discoveries into play, and these discoveries are what enhances and propels the art of war. **Stratagems** often employ the use of uncertainties and surprise or the use of unconventional actions, such as mixing fake actions with real ones. Li adds that the use of uncertainties is a conscious act that uses **stratagems**. Their use can resolve a dispute in the early stage of a confrontation and before the situation becomes too heated.<sup>97</sup> This kind of diplomatic, political, or economic use of **stratagem** should be considered by US analysts as they ponder Chinese moves in the South China Sea.

The abstract of **Kang Wuchao's 2007** article, "Analysis of National Interests and Strategic Orientation," begins with the sentence "The determination of strategic orientation is the result of the composite effects of various **subjective** and **objective** factors."<sup>98</sup> This focus underscores the ties of **subjective** and **objective** thinking not only to strategy but also to national interests. Kang states that national interests determine the selection of China's strategic orientation. He lists three factors that help determine national interests. First, territorial integrity and sovereignty are the most important factors. Second, geographic strategic interests have been growing in importance. They determine strategic orientation based on a country's goals for future growth beyond its borders. Finally, the integration of the two issues (territorial security and geographic strategic interests) reflects strategic orientation. Kang states that this concept of integration was exemplified at the beginning of the 1950s, when China decided to fight alongside North Korea against the United States. China has half of its heavy industry in the northeast (territorial security) and the Korean Peninsula is a springboard for landing on mainland China. In a more contemporary example, Taiwan is viewed as a focal point for China's sovereign, political, economic, and military interests.<sup>99</sup>

A **2009** article in *China Military Science* by **Huang Yingxu** and **Li Ming** offered the view of two military officers on the Communist Party of China's views on national interests. National interests, they note, determine political doctrine, guidelines for action, strategy, and class or political group policies. Mao had a vision of permanent interests that corresponded to the nation's interests. National interests must embody the common interests of the Chinese people. They sit above class and special interests. The common interests of the people of China can be found in the development of social productive forces that

offer a rise in living standards. Chinese strategy in all of its forms (political, military, diplomatic, and developmental) must take this common interest as its ultimate goal, according to the authors.<sup>100</sup>

Over time, Huang and Li add, each leader of China not only has stressed the same key items, but they have also expanded on these items in accord with contemporary developments. **Core interests** remain national sovereignty and security.<sup>101</sup> Mao was the leader who put state sovereignty, security, and territorial integrity above all else. Deng Xiaoping, Jiang Zemin, and Hu Jintao have added economic development, comprehensive power, and developmental interests, respectively, to this list. Deng Xiaoping stated that “national rights are more important than human rights.”<sup>102</sup> Jiang focused on the security of strategic materials such as food and oil, as well as on information and financial security. Hu has expanded the list to include the “developmental interests” of maritime, space, and electromagnetic space issues, among others.<sup>103</sup> Finally, the authors state that to confront “hegemonism and power politics” China must increase its economic and military power.

Senior Colonel **Wang Guifang** was a research fellow at the Department of War Theory and Strategy Research at the Academy of Military Science when he wrote on national interests in *China Military Science* in **2009**, some three years after his first article appeared. He noted that, broadly speaking, there are two types of interests: security and developmental. National security interests are the most important element of national interests. They have always maintained an **objective** existence.<sup>104</sup> However, as society changes, so too does the **objective environment** and, thus, the content of national interests. Guifang focused special attention on **developmental interests**, noting that:

It is exactly because of the more pronounced feature of development interests that the formerly self-contained security interests entered an unprecedentedly broad realm and incorporated, at the same time, certain content that had not been given serious attention before, such as closer ties with many fields of social and national life. Judging from its composition, national security interests not only include traditional military security interests and political security interests, but also include a broader range of content, including economic security interests, cultural security interests, information security interests, ecological security interests, environmental security interests, and space security interests that have become increasingly pronounced in recent years.<sup>105</sup>

Guifang added that **core interests** remain state sovereignty, territorial integrity, national unity, political stability, and national survival. In times of **developmental interests**, energy resource security interests and others are increasing. Perhaps this idea has been expressed most explicitly in recent conversations with Chinese officials, who have stated that the South China Sea area has become a **core interest**. In terms of geological space, Guifang notes that “sea space is more important than land space.”<sup>106</sup>

**Zhang Xiaotian**, writing in **2010**, discussed the demands that national interests place on strategy.<sup>107</sup> Even though only a major, his article was placed first in the No. 3, 2010 issue of the journal *China Military Science*. Zhang defined national interests as “the **objective** material demand and the spiritual demand that a country relies on for survival and development. It is the starting point and the

destination of a country's various acts." There are **three levels of national interest: core, key, and general**. **Core interests** are fundamental interests bearing on a country's survival, security, and development. **Core interests** affect military strategic orientations. Key interests include a country's economic development and the security of its communication channels, energy supplies, and regional interests. General interests include citizen safety, enterprise development, ecological security, and so on. General interests have the least impact on military strategy.<sup>108</sup>

There must be a balance between a country's strategic capabilities and the expansion of a country's national interests. Perhaps one can assume from this statement that China's new military capabilities are a result of its expanded set of national interests. One cannot get ahead of the other.<sup>109</sup> National interests are a primary cause of war, according to Zhang. **They determine a country's strategic intentions**; are one of the five causes of war (fame, interests, evil doings, internal turmoil, and hunger); are the essential basis for distinguishing friend from foe; and impact the entire course of a war's development (its scale, intensity, length, and use of strategic weapons). National interests are the start point and destination of strategic guidance since they determine strategic situations and strategic intent. The ultimate goal of strategy is to defend or seize national interests.

These interests change, however, over time and military strategy changes with them. There are four causes for changes to national interests: developments in science and technology that result in an expanded area of reach for national interests; the rise and fall of a country's strength and status; changes in **subjective** cognition that alter the scope of national interests (based on a new understanding of a world whose direction and actions constantly change); and differing interpretations of international rules, regulations, and laws. Due to China's increased status and strength, the rest of the world should expect a sudden expansion of China's national interests, in Zhang's opinion.<sup>110</sup> This expansion does seem to be underway.

The expansion of national interests results in increased demands for strategic capabilities. Perhaps this is why the world is witnessing the rapid expansion of China's military force, especially its air, sea, and space components, along with strategic countermeasures.<sup>111</sup> National interests also influence the adjustment of strategic deployments. What all of this implies, Zhang notes, is that military strategy must continually adapt to the growing impact of the expansion of national interests in China. The country's leaders insist that development will pursue a peace-keeping resolution, insist on cooperation and win-win outcomes, play a constructive role in regional and world development, and not aim at territorial and influence expansion.<sup>112</sup> This sounds like a kind and humane approach to world affairs. He states:

The development of China's national interests at the new stage in the new century is fundamentally different from the expansion of interests by Western big powers in history, and this difference is seen in such areas as the objectives, means, ways, and processes, as well as the impact produced. The factors that determine this difference not only include



the influence of the **objective** strategic environment but also the results of **subjective** strategic choices.<sup>113</sup>

However, all of these points are contestable, the latter two particularly so. China is implementing regional development in countries that ignore basic human rights or democratic rule. Simultaneously, the Chinese label the United States as a hegemonic power bent on world domination using colonial methods of enslavement, an analysis that totally ignores the United States' peacekeeping work, food supplies to needy nations, and countless other humanitarian acts. It also ignores China's own history of bloody slaughter during the Cultural Revolution, problems with its own work force, and unwillingness to recognize its own support of regimes that ignore basic human rights. The Chinese suggestion that the state reject the use of influence is equally as contestable, since the use of soft power is a growing Chinese preoccupation, one based on public relations and the spread of China's cultural influence worldwide.

It should thus be expected that the greatest period of Chinese expansion may occur in the next ten years. They perceive a current window of opportunity of which to take advantage. The expansion of national interests expands national strategic interests and the space in which the leadership can maneuver. For example, China is trying to establish logistical bases abroad such as a potential port in Gwadar, Pakistan. Military tasks now include safeguarding opportunities for strategic development and safeguarding national interests worldwide.<sup>114</sup> On the other hand, with an expansion in the number of partners working with China (for example, in the Shanghai Cooperation Organization or SCO), relations with other nations are more complex than ever before.

**Zhu Feng**, the deputy director of the Center for International Strategic Studies of Beijing University, was interviewed online by Li Ying in January **2011** about China's **core interests**. He stated that he agreed with State Councilor Dai Bingguo's assessment that China's **core interests** are to maintain its social system and national security, to maintain China's national sovereignty and territorial integrity, and to maintain steady economic and social development. **Development**, Zhu noted, meant achieving secure supplies of energy and resources.

Zhu recommends a larger role for China's foreign ministry and public opinion organs. He further notes that China must use proper language and behavior and avoid "talking to ourselves and playing with ourselves" via simply trying to attain the moral high ground and repeating melancholy stances.<sup>115</sup> That is, public opinion must be used to buttress support for strategic interests. Reporter Li Ying, in his introduction to his interview with Zhu, noted that national interests "both **objectively** exist and are to a very great extent determined by **subjective** judgments" thereby underscoring the objective-subjective link yet again.

## CHINA'S STRATEGIC/OBJECTIVE ENVIRONMENT

The relationship between the strategic environment and military strategy is a relationship between **objective** reality and **subjective** guidance.<sup>116</sup>

Before examining China's strategic resource theory it is worthwhile spending a few minutes to look at China's objective environment, the Chinese environment in which strategic resources are postulated and developed. The opening quote to this section is taken from the opening paragraph of a chapter titled "The Objective Environment of Military Strategy" in the 2007 PLA book, *On Military Strategy*. It once again underscores the close link between strategy and China's objective-subjective thought process. Key factors in the international strategic environment (political, economic, military science and technology, geography, etc.) provide the **objective** factors that determine the basic direction for building and wielding military force. **The proper assessment of the international strategic environment is the prerequisite for formulating military strategy.** Characteristics of the times (i.e., science and technology advances that influence the shape of war), the world's strategic structure (balance of power, demand for resources), and strategic trends (economic and defense policies, military deployments and alliances) of other countries all affect this environment.<sup>117</sup>

China's domestic strategic environment also impacts military strategy. The most immediate impact is felt in its geographic and political environment and comprehensive national strength. Geographically a **nation's security coefficient** is determined by a country's size, location, topography, weather, resources, and population. These determine the arrangement of military forces and key points of strategic defense. The political environment is determined by a nation's political qualities, policies, legal system, and basic social characteristics. Comprehensive national strength is determined by a country's economic strength, defense strength, and national cohesion. They make up a nation's total material and spiritual strength.<sup>118</sup>

The authors noted that there are natural geographic elements (a state's geographic position, size, and shape of territory; natural resources; national capital; national boundaries; distance between states; and grand strategic space) and human geographic elements that affect strategy. Based on these relationships, an assessment of the security environment and an orientation of a state's strategic role must be made to include judgments on the direction of the main strategic threat and a determination of the key points of strategic attack and defense. There are vital interests between states, between the interests of nations and religions, between various strategic alliances, and between geo-economic relationships that may determine the lineups of certain players.<sup>119</sup> Thus, a strategic study must be comprehensive, and it must view war from various aspects and stages (space, time, etc.).<sup>120</sup>

Economic globalization and openings with other nations have expanded the Chinese leadership's view of national strategic interests. A nation's overseas dependence on economic development and on

requirements for strategic resources is rising. These requirements are hindered by the unstable economic environment and the necessity to safeguard overseas investments and sea-lane security. National strategic interests have expanded from land to the sea and from the air to outer space. Non-traditional security topics have taken on added importance, to include environmental, information, and social security issues. Chairman Hu Jintao has made the following demands on the military: assure Party dominance, secure strategic opportunities for national development, and safeguard national interests and world peace.

Military strategy's basic strategic tasks include first of all safeguarding the Party's ruling position, a task of prime importance which, to a Western mind, seems like an act of self-survival and demonstrates a lack of confidence in the military leadership. A second task of military strategy is safeguarding national unity and China's sovereignty and integrity. Deng Xiaoping pointed out that sovereignty and security must always be considered first. Containing Taiwanese independence activities occupies first place here.<sup>121</sup> Not only must border defense and counterattack operations be perfected, but the PLA must also "actively construct military situations that favor us in resolving disputes over border territories."<sup>122</sup> Constructing favorable situations is reminiscent of constructing *shi* or strategic advantage.

Contention over maritime issues is becoming increasingly intense. The Spratly Islands, the authors note, represent China's outpost and communication link to Southeast Asian countries, Europe, and Africa; are the outpost of security for China's mainland in the south; and have an enormous impact on China's economic affairs. The South China Sea has an abundance of aquatic products and large amounts of oil and natural gas resources. The East China Sea is the channel through which China must pass to get to the Pacific Ocean and the United States, East Asia, and the south of Russia. It has abundant energy and fishing resources as well.<sup>123</sup>

A third task of military strategy is safeguarding social stability within the country and a fourth task is safeguarding the ever-expanding area of strategic interests. **China is moving from survival interests toward developmental interests.** As national interests expand, China must enlarge its effective space and defensive combat capabilities in accordance with its military strategy. As requirements for oil consumption rise daily, it becomes ever more important to safeguard maritime shipping routes. Finally, military strategy must be able to safeguard world peace, space interests, information, and science and technology developments. With regard to information, effective information defense forces must protect the country from reconnaissance and information incursions from other countries while simultaneously information offensive forces must be developed and information deterrence activities improved. World peace developments include expanding military exchanges and improving mutual military trust, strengthening regional stability, participating in United Nations (UN) peacekeeping operations, and promoting international arms control, disarmament, and nonproliferation pacts.<sup>124</sup>

Retired PLA general **Yao Youzhi**, writing in **2007** in the book *National Defense Ideas and War Strategy*, listed the elements of the strategic environment that have evolved in the 21<sup>st</sup> century. These are political multipolarization, economic globalization, and military informatization. As a military officer, Yao focused on the latter issue the most. He stated that informatization has improved the military superiority of hegemonic countries; has led to an arms race for the strategic initiative; has changed the shape of warfare; and has turned space into the new commanding elevation for international military competition. Informatized warfare depends, to a great degree, on the support offered by military space systems. Victory or defeat can depend totally on fighting for and controlling information superiority and space supremacy.<sup>125</sup> Yao added that traditional security threats and non-traditional security threats have become interwoven. For example, Yao writes that the United States is using the argument of “counterterrorism” as a means to carry out a global hegemonic strategy through a unilateralist policy that, to a large degree, influences the international strategic situation. Of course, Yao’s comments came in 2007. Perhaps now, some four years later, his tune may be different due to China’s financial advances, Russia’s war with Georgia, the turmoil caused by Arab Spring in the Mideast, and other factors.

Yao also discussed border disputes and maritime interests affecting China’s strategic environment. First, he discussed the Sino-Indian dispute. He notes that along the 2,000-kilometer border the two nations share there are eight places of potential conflict. Three are in the western segment of the border, four are in the central segment, and one is in the eastern segment.<sup>126</sup> Second, he discussed the South China Sea dispute, where four large archipelagos—the Pratas Islands, Paracel Islands, Macclesfield Bank, and the Spratly Islands—are claimed by China and by adjoining countries. China’s policy has been to shelve disputes and engage in joint development of the region, according to Yao. He writes:

We need to soberly recognize that China’s reefs have been occupied, its marine resources have been plundered, and the trend of ‘internationalizing’ the South China Sea dispute is still growing...disputes in the South China Sea will continue to move in the direction of ‘pluralistic occupation of the reefs, legitimized division of the sea area, internationalized exploitation of the resources, and complicated military struggles’ as intervention and involvement by international powers becomes increasingly obvious.<sup>127</sup>

Third, he discussed the East China Sea continental shelf and Diaoyu Island dispute. China, divided by the “Okinawa Trough” from Japan, wants the shelf divided according to the principle of “natural extension,” using the centerline of the trough as the boundary. Japan wants to use the centerline of the sea to divide the shelf. The result is a disputed area of 210,000 square kilometers. Yao notes that the countries could still clash over the issue of oil and gas field exploitation in the area.<sup>128</sup> Internally, of course, China has to control supporters of East Turkistan Independence and Tibetan separatists who are continually working to stir up trouble, in China’s view, in China’s Xinjiang and Tibet regions.

Yao appears less worried over North Korea than Japan. He considers the latter as striving to become a military power at an alarming rate. In Southeast Asia, Yao notes an alarming arms expansionist

trend in the countries of the Association of Southeast Asian Nations (ASEAN), a growth in terrorist and separatist activities in the region, and the growing intervention of powerful countries in the region's affairs. In South Asia the disputed area of Kashmir continues to fester and Yao believes the possibility always exists that peace could evaporate quickly in this region. He believes India is sparing no effort to expand its political influence at the international level. Moreover, as in other regions, the fight against terrorism remains grim. In Central Asia the rise of the "three forces" threat remains the center of focus. These are the religious extremist, ethnic separatist and international terrorist forces.<sup>129</sup>

Yao provides a glimpse of the growing confidence of China's expansionist tendencies. He writes that "in the new stage of the new century, China's rapid economic development is certain to promote continual expansion into external economic spheres." Further, "security problems concerning China's access to strategic energy in particular will become more prominent." He concludes by noting that military strategy must be ready to ensure a security environment for China that is favorable to national development and economic rights.<sup>130</sup> Interestingly, Yao does not address Chinese expansion into Africa or South America or other areas of the globe.

**Shi Yinhong** of Renmin University believes that China should mainly choose bandwagoning and transcendence as diplomatic strategies. Bandwagoning means jumping on the bandwagon of a trend, abiding by international norms, and acquiring advanced technological, management, and other methodologies. This is done by forming a world relationship with other countries based on harmony and common interests. Transcendence means participating in all international security institutions that benefit China more than they cost China.<sup>131</sup> **Guo Shuyong** of the Foreign Languages University of the PLA stated that leader, onlooker, challenger, and partner strategies have been the historical categories of grand strategies.<sup>132</sup> **Ye Zicheng** of Beijing University noted that China has yet to form a full strategic system.<sup>133</sup>

### **GEO-RESOURCE ISSUES**

Thus far this paper has outlined elements of the Chinese strategic thought process, China's concept of national interests, and China's objective environment. It is now time to take these background issues and apply them to China's resource strategy. One Chinese analyst has defined a **strategic resource** as "the long-term, overall, active and constructive **materials influencing China's security and development**. The said resources include economic resources, financial resources, technological resources, information resources, and resources of professional personnel."<sup>134</sup> Recent Chinese articles have deemed soft military power, defense personnel, and near space as strategic resources. Strategic resources are required to maintain China's peaceful development and comprehensive national power is said to encompass "all sorts of national strategic resources."<sup>135</sup> Thus, when talking of strategic resources it is necessary to be precise. National strategic capabilities are said to refer to a "nation's capabilities of turning strategic resources into its strategic intention and achieving its strategic objective."

Another source defined a strategic resource as the cornerstone of national security and development; a “critical point in the geostrategic interest competition among the big powers” that needs to find expression in state policies and state behavior; and the essence of the state’s future security and development.<sup>136</sup> The author stated that China:

Should, according to the **objective** situation of the changes in the international environment and domestic development, redefine and make clear the status of strategic resources in our national security, direct the strategic view to the establishment of a stable strategic resources security system, strengthen the state’s strategic reserve construction, increase the development and use of international resources, adjust the domestic resources consumption structure, and guard against the tendency of losing the strategic resources control direction in the course of opening up to the outside world.<sup>137</sup>

China’s military strategic capability, the author adds, must match its national strategic status and be in line with national development interests. National strategic capability is more important than comprehensive national power since it is the shield of national security and development. It organizes strategic forces to achieve strategic objectives and represents a unity between material and spiritual capabilities as well as between strategic planning and the art of command.<sup>138</sup>

In **1998**, in an interview with **Ku Guisheng**, a deputy Director of a Scientific Research Department at China’s NDU, reporter Yu Chunguang asked about China’s desperate strategic resource situation and what could be done. Ku responded that a top priority was to work out a reasonable strategy for the development and application of strategic resources. He recommended the following: to conduct a universal survey and assessment of China’s strategic resources; to set up a reasonable “system for comprehensively evaluating strategic resources” and a regulation and control mechanism; to tap new natural resources and consume them in an economical and reasonable way; to improve the protection and management of strategic resources; and to institute a strategy for the exchange and replacement of natural resources.<sup>139</sup>

Another source, *The Science of Military Strategy*, noted in **2001** that many geographic elements form a state’s geo-strategic thought process. Resources fall under the category of “natural geographic elements.” Due to its size, China is able to exert its geostrategic influence well beyond its local area due to its strong political, economical, scientific, military, and technological power.<sup>140</sup> Further, authors Peng and Yao write:

Natural resources are sources of means of subsistence and means of production of human society as well as the **objective** conditions on which existence and development of a state depend. Natural resources may fall into two broad classes: regenerative resources (resources of land, water, biology, etc.) and non-regenerative resources (mineral resources and fuel resources, etc.). Distribution of resources consists of land resources and maritime resources. In history plundering and controlling natural resources were always the economic root cause of war. Under modern conditions scrambling for

resources is not only represented by seizure and control of land resources but also represented by that of oceanic resources.<sup>141</sup>

With regard to oceans, the authors write that “it is a key point of a state’s geo-strategic relationship to maintain its national maritime power and rights in accordance with the United Nations Convention on the Law of the Sea (1982).”<sup>142</sup> Outer space is also a new and sensitive national geo-strategic relationship.<sup>143</sup> In order to decide when to act on China’s geo-strategic relationships, Peng and Yao note that “If a state wants to make a correct strategic decision, it must at first soberly recognize and judge its position in the geo-strategic configuration and international order, and then define its own role in international relationships so as to adroitly guide its behavior according to circumstances, go after gains, and avoid harm to make maximum realization of a state’s strategic interest.”<sup>144</sup> Peng and Yao conclude this section of their book stating that the interaction and mutual influence of one state on another is the result of different national geo-strategic interests. Sometimes states come together for their own ends and sometimes they come together as rivals for the same resources. States may form blocs with other states, they may remain neutral, or they may adopt an anti-alignment stance.<sup>145</sup> Further, different strategic geographic features will bring about different developmental orientations of strategic power.<sup>146</sup>

Entire books have been written on the topic of grand strategy by both Chinese and US analysts. In **2004 Men Honghua**, speaking at a conference at Renmin University in Beijing, stated that grand strategy studies are based on three variables: national strength, international institutions, and strategic concepts. The process starts, however, with an evaluation of strategic resources. Men stated that grand strategy can be defined as “the art of integrated use of national strategic resources to fulfill national security and international objectives, whereby a state uses its strategic resources and strategic means, at the political, economic, military, cultural, and ideological levels, to protect and further the country’s overall security, values, national interests, and so on.”<sup>147</sup> Men notes that the definition stresses the use, importance, and implications of strategic resources for fulfilling the objectives of grand strategy. Strategic objectives must be kept in balance with strategic resources and means.<sup>148</sup> Men stated that strategists must possess the professional qualities of “strategic thinking, including awareness of overall interests, foresight, knowledge of history, awareness of the big picture, grand vision, rationality, logical thinking, and the power of integration. Specifically speaking, grand strategy studies emphasize relevance to overall interests and totality before anything else and entail integrated thinking to achieve the maximum goal of the country.”<sup>149</sup>

National strength can be measured through a quantitative analysis of a nation’s strategic resources and through international comparison. National strategic resources include not only hard strength (economic and military resources) but also soft strength (strategic conception, national strategic thinking, and decision-making power). An evaluation of national strategic resources allows for an evaluation of

strategic capacity, the optimization of strategic concepts, the definition of strategic objectives, and the planning of strategic content and execution of strategic means.<sup>150</sup> It also determines whether a country must seek strategic resources outside its borders.

**Tang Yongsheng**, an Assistant Director and Professor at the Strategic Studies Institute at China's NDU, penned an interesting **2008** article on strategy. He noted that there are changes to the concept of power in the international environment and the environment also has much new content due to the effect of globalization. However, China does not appear to be thoroughly probing the logic inherent in these changes, thus lowering the mandate for developing a new strategy. Further, it is not enough to equate planning national grand strategy with an extension of military strategy and equating strategic planning to a simple extension of **stratagem**. In planning national grand strategy it is necessary to regulate the use of **stratagem**. If the goals of grand strategy are correct, then optimizing **stratagem** selection in the choice of means, opportunities, and skills will undoubtedly help in the faster attainment of strategic goals. Strategists must learn to judge the hour and size up the situation, understand and adapt to new developments, and seek long-term development. The clever strategist does not rely on strength to impose his ideas on the **objective** world but rather can recognize the situation and use his own capabilities within the context provided by the logic of history. Strategic planning must encompass a more far-reaching philosophical realm that takes advantage of opportunities. China must create conditions and promote processes that lead to the country's rejuvenation, to include balancing relations with the United States and building mutually constraining relationships. China's path to attain its ever-expanding set of national interests should be as much circuitous as straight, gradually accumulating the strategic initiative during a long-term interaction with the external world. The US-Japanese link should be diluted, the Sino-ASEAN link strengthened, the SCO consolidated, and the South Asian Association for Regional Cooperation (SAARC) should play a positive role in regional cooperation. Finally, China should take some bold steps and undertake international responsibilities.<sup>151</sup>

**Zhang Minqian** wrote another interesting **2008** article that attempted to get at the changes that globalization has introduced to geopolitics in general. Zhang was the Deputy Director of the International Strategy and Security Research Center at the University of International Relations when the article was written. He noted that the idea of "many winners" had taken priority over the "law of the jungle" due to the increased influence of international systems. Other issues that have impacted on the concept of geopolitics include geo-economics, geo-culture, technology power, information power, nongovernmental policies, and geo-space (regional and global geography). The composition of strategic forces is now driven by economic interests, culture, and other concepts (the role of resources, capital, nontraditional security factors, etc.) more than ever before. Small countries possessing important strategic resources are having added influence on international relations. These changes led Zhang to believe that China's



strategic choices should focus first on handling relations with countries on its periphery and with the United States. Second, China should champion international cooperation to deal with global and nontraditional security challenges. Finally China should attach more importance to soft power and abandon the “victim” mindset as well.<sup>152</sup>

**Xiong Guangkai**, former keeper of the intelligence portfolio as Deputy Chief of the General Staff (he retired in 2005) and currently the honorary chairman of the China Foundation for International Strategic Studies, viewed the new global security strategic situation and environment in **2009** as in need of a comprehensive security approach. This is because issues of integration and coordination are affecting all areas (economics, science, technology, environment, politics, and the military). China should safeguard its national development and maintain the present important period of strategic opportunities.<sup>153</sup> Oil, food, climate, public health, information, and financial issues are the top security concerns of China, in Xiong’s opinion. For example, with regard to oil issues, Xiong noted that China’s approach must include “implementing a strategy of diversifying channels of energy supply, adjusting energy consumption structures, increasing strategic oil reserves, and **intensifying efforts to exploit overseas oil through international cooperation.**”<sup>154</sup> Oil will require transportation routes. With oil China is making waves in its efforts to declare the South China Sea to be a **core national interest**, and it is exploring other sea sovereignty and maritime interest issues as well.

From this basic understanding, China’s attempts to acquire resources (energy, raw materials, etc.) for its developmental needs and to secure supply routes for these resources into China should form the basis for a resource strategy. Three questions ensue: what resources do the Chinese need? Strategically, what are the **objective** factors of China’s resource strategy (the what and the where)? What are the **subjective** factors involving their acquisition and transport? In the end, does the acquisition of these resources fulfill the **developmental interests** and needs the Chinese seek? **Developmental interests** and needs may be for the good of the populace, for the attainment of military advantage, or for a host of other issues. For the remainder of this paper any strategic resource reference is to strategic energy or mineral resources.

Two strategic resource issues will be addressed in more specific detail below. The external resource that is of concern to Chinese national security is oil. The issue of China’s strategy to obtain oil access in Sudan will be covered in particular, as well as the resources transportation route to China, that is, the South China Sea issue. The internal strategic resource of China that affects other nations is rare-earth elements, of which China currently controls more than 90% of the world supply. China’s strategy in regard to this resource, a strategy that has not been extremely successful of late, is also covered. The reader is reminded that this unclassified look at China’s geostrategic concerns offers few glimpses of thinking from above, that is, the opinions of China’s top leadership. Rather, the examination is based on

articles and books produced by journalists. However, their thoughts are quite revealing and worthy of examination as good examples of Chinese strategic thought.

### **African Oil**

Energy resources are always a resource of the first rank. They represent the primary motivation behind any developmental strategy, whether it be for the citizen (oil for cars, electricity for home heating and cooling, etc.) or the military (fuel for tanks, ships, and aircraft, etc.). The impetus for China's quest for energy resources, especially oil, is based on China's large and growing population and its dwindling supply of domestic oil reserves. China's three best-known oil corporations—China National Petroleum Corporation (CNPC), China Petrochemical Corporation (Sinopec), and China National Offshore Oil Corporation (CNOOC)—are all working diligently to bring black gold back to China.

**Chen Bo's 2005** article, "On Strategic Resources and National Security," in *China Military Science* addressed China's energy concerns, using petroleum as a case study. Chen wrote that without a stable supply of strategic resources a country does not have complete national security. Strategic resources help ensure economic growth, political stability, and military security. Petroleum is the most important strategic resource since it is "a key factor for creating social wealth, for making scientific and technological progress, and for supporting and winning victories in war."<sup>155</sup> It is "the basic driving force for industrialization and an industrialized society."<sup>156</sup> Since oil resources are unevenly distributed (sometimes in contested areas), obtaining essential supplies has become a critical national security issue. Whereas much of today's oil supplies are found in an arc from Northern Africa to the Middle East to Central Asia, the Asia-Pacific region is short on oil resources.<sup>157</sup>

With resources located in areas other than the Asia-Pacific region, Chen stresses the importance of securing routes for the import and export of resources. He writes that "those who control the oil transportation routes will actually hold dominance over oil resources in that specific region."<sup>158</sup> This situation could make maritime and pipeline transport the focal points of future rivalries between countries. The Strait of Malacca between Malaysia and Indonesia is important for China since it links the Indian Ocean with the South China Sea and is a main passageway for transporting oil to China.

China's rapid modernization will increase its demand for oil. Since 1993 China has been an oil importer. In 2005, Chen stated that China had 21% of the world's population, its economy accounted for 12% of the world's total, but its oil resources accounted for only 2.3% of the world's total. Thus, China's demand for oil is increasing yearly. Chen predicted that China's oil demand will be 300 million tons in 2010, 400 million tons in 2020, and 500 million tons in 2050. With this situation in mind, Chen notes that "it is necessary to make proper strategy and policy adjustments as soon as possible to guarantee national security in this regard" and "it is necessary to redefine the status of strategic resources in China's national security according to the changed **objective** situation of the internal environment and China's domestic

development.”<sup>159</sup> Not surprisingly, Chen states that China must speed up developing a credible maritime security guarantee and its diplomatic efforts must focus on this issue as well. China must establish stable relations with resource-rich countries, sign bilateral and multilateral resource supply agreements where possible, and take part in international cooperative organizations. Further, Chinese diplomats should explore risk-sharing and comprehensive development issues with resource-rich countries. More specifically, China should:

- Expand its economic and political influence in the Middle East, Central Asia, and South America
- Increase those people’s understanding of China
- Build up a benign environment favorable to China’s import of oil
- Have Chinese petroleum enterprises internationalize business contact with Asian, African, and Latin American countries
- Become a balance to the influence of Western transnational groups.<sup>160</sup>

Chen also feels that China should advocate, promote, and participate in the building of an energy source cooperative supply system in Northeast Asia and in a long-term mechanism for guaranteeing the effective supply and security of strategic materials. Internally China should establish a state strategic resource security system that includes the state’s strategic storage system, the development of domestic and overseas resources, and the strategic adjustment of the domestic resource consumption structure. Oil storage should not fall below one quarter of the annual net import volume of oil.<sup>161</sup>

In another **2005** article, this time from the *China Daily*, **Zhang Weiping**, an associate chief economist at CNOOC, noted that leading powers such as the United States adjusted their energy strategies to fit contemporary circumstances. This included expanding security resources and transportation routes. The paper stated that “the United States has managed to strengthen its strategic position in the Middle East in the wake of the Iraq War and increased threat deterrence along oil transportation passages through its military presence. At the same time Washington has reinforced control over global strategic resources via giant multinationals’ activities worldwide.”<sup>162</sup> These issues—military presence and a deterrence posture over transportation routes—appear to be key ingredients of China’s oil strategy, as the information below will demonstrate. How widespread this thinking goes is unknown but it is apparent that many Chinese analysts believe the United States went to war with Iraq simply because the latter posed a danger to the stability of the United States’ oil market. Will the Chinese use this rationale to go to war themselves over similar energy concerns? Hopefully it will not.

Zhang then made two rather bold suggestions. He stated that China should undertake the following steps: (1) prospecting (involving huge risks but potentially handsome returns and acquisitions) for gas fields and oilfields should be undertaken simultaneously; (2) tapping into energy resources in countries that have backward oil and gas infrastructures (while helping them establish their own energy

industries) should be pushed simultaneously. This helps ensure a win-win situation in which both parties are able to share the benefits. In hindsight, China has done just that in African countries.

China's strategy, according to one **2005** article, is to use military measures as a backup only, to take advantage of new technologies, funds, and management superiorities, and to satisfy Chinese needs in countries other than those controlled by developed countries. This strategy includes developing greater resource diplomacy, energy diplomacy, and state diplomacy to create the political and economic environment and a safe external environment (sea routes?) for Chinese companies to go global. Further, China must move away from its dependence on Middle East oil and diversify its imports. It must participate in organizations with influence over the international energy investment scene to create more favorable conditions for its foreign policy ventures.<sup>163</sup>

**Xiong Guangkai** notes that China is now the world's second largest oil consumer.<sup>164</sup> He further writes that in **2006** British Petroleum's World Energy Statistics stated that global oil reserves "would only last another 40 years or so if their exploitation was kept at the current speed, while natural gas and coal reserves would only last 65 or 162 years respectively."<sup>165</sup> For China, maintaining sustained development and overseas access to this diminishing domestic resource (oil) have become vital strategic challenges.<sup>166</sup>

Africa, of course, has been a focal point for Chinese strategic activities for some time. A **2006** report stated that these strategic activities differ from the US approach to the region in a significant way. China is making a huge investment in infrastructure, medical service, and so on. The Chinese accuse the West of simply making accusations against the local government and imposing sanctions. The West, this report stated, hopes to kill off the "illness" (poverty, corruptions, etc.) at one blow while China hopes to "improve local immunity."<sup>167</sup> China's Ministry of Foreign Affairs, also in 2006, stated that "we will not act like the western colonialists in barbaric plunder and bloody violation of human rights."<sup>168</sup> China, on the other hand, "improves local human rights by developing the local economy through cooperation with local oil companies."<sup>169</sup> Poverty must be eliminated and sanctions do nothing to help this. This line of Chinese reasoning, of course, would be seriously tested if placed against US standards. It is well-known that the United States has accused China of violating human rights and supporting corrupt dictators for years in Africa.

A major reason for China's interest in African oil is that most members of the continent are not members of OPEC and thus "not subject to OPEC production restrictions."<sup>170</sup> Further, African nations admire the rapid growth of the Chinese economy, while Africa offers China a diversified energy supply channel that is fairly reliable and safe. One uses the term "fairly" due to the occasional kidnapping or use of armed gangs to extort money from foreign workers and local governments. Chinese policy makers, however, tend to ignore these difficulties (civil strife, famine, ethnic conflict, etc.) and hope to capitalize on the exodus of some US and European oil companies.

Another potential strategic issue, one at odds with traditional Chinese policy, is the easing of China's nonintervention policy toward other nations. **Wu Lei** and **Lu Guangsheng**, Professors at Yunnan University, stated in **2008** that adjustments in the principle of "non-intervention in internal affairs" offer several benefits. These include new diplomatic ideas that agree more completely with reality and the further improvement of the practicality and flexibility of China's diplomatic policies. Such adaptation will only be partial, of course, and not total. Influence can be attained more moderately through multilateral mechanisms, UN diplomacy, backstage diplomacy, and public diplomacy.<sup>171</sup> Wu and Lu completed their recommendation for more adjustment in China's foreign policy by noting that adjustments would be "good for enlarging China's national interests, good for the long-term overall interests of African oil-producing countries, and good for embodying China's international responsibility and international image..."<sup>172</sup> Obviously, this recommendation could counter one of China's Five Principles of Peaceful Coexistence (mutual respect for the sovereignty and territorial integrity of other nations) if taken too far.

In **2008** **Zhao Zhiming**, the executive president of the China Petroleum and Petro-Chemical Industry, stated that China hopes to practice the principle of mutual benefits in developing African oil. The formula for success to date, according to Zhao, has been to first altruistically offer assistance, then send people to provide on-site training, and then run joint ventures with African countries and further train local talent. Technical support is buttressed with offers of financial assistance.<sup>173</sup> Chinese authors believe that such cooperation is based on efficiency, equality, and mutual-trust. This slow approach not only keeps Africa interested in China and lessens fears of being manipulated but also helps firm up long-term partnership packages. Moreover, there are many countries with which to implement this policy. To date, China has oil agreements or talks with Algeria, Angola, Chad, Congo, Egypt, Equatorial Guinea, Ethiopia, Gabon, Kenya, Libya, Niger, Nigeria, Somalia, Sudan, Tunisia, and Uganda. Geographically these countries are located in Africa's core area and north/northeast coast (see Appendix Two).

In **2010** **Sun Xuefeng** and **Wang Haibin**, identified only as two Chinese scholars, wrote a lengthy article for *Dangdai Yatai* on China's crude oil strategy. The article is full of interesting insights and implications about the objectives and methods of Chinese oil strategies. The authors note that, in light of China's growing demand for oil to satisfy the growing number of people and industries with energy needs and demands, a "go global" strategy was adopted in 1997. The effort has met with successes (such as the CNPC projects in Sudan) and failures (CNOOC's inability to acquire Unocal Corporation being the most publicized). Based on these experiences, however, a methodology was reached on the types of strategies and tactics to use to gain access to oil.<sup>174</sup>

The authors contend that a key to entering an oil-rich area is to ease resistance. That is, instead of stirring up confrontation (read "not worrying about corruption or human rights violations") or resorting to the use of force (read "no Iraq"), China should not take any initial action that would force the other side to

make concessions. The strategies involved to limit confrontation and encourage participation involve the limited sharing of profits and the elimination of obstructions posed by one's rivals (again, read "US insistence that countries adhere to human rights demands"). By exploiting contradictions between China and other rivals, China can make inroads in some nations that the United States and other nations cannot. Using contradictions, the authors note, means "using the strategic contradictions and political differences within the party that owns the resources or between the party that owns the resources and other rivals to secure oil development rights."<sup>175</sup> In summation, Sun and Wang contend that the strategies used by China to gain access to an overseas oil resource and participate in its exploitation are the strategies of limited diversion, limiting returns, and contradiction exploitation, as mentioned. To stabilize and even expand its oil interests in a nation China has developed three strategic initiatives. They are:

- Follow a strategic orientation, which means maintaining and enhancing China's influence over the resources owner through security protection. This "strategy requires the nation [China] to possess a substantial military power." Perhaps therein lies one significant reason for China's growing military power.
- Strengthening ties with the resource owner by providing political support and economic aid or by establishing trade contacts.
- Using the draw of technology to upgrade existing oil exploration and recovery methods in the country and thereby boost returns on development to maintain and expand China's influence.<sup>176</sup>

Interestingly, when discussing the stabilization and expansion phase of strategic operations, the authors cited the CNPC's successful strategy in regard to Sudan. The examination was made "in conjunction with strategic theory." The basic objective is to increase one's influence in the resource-rich area, eliminate obstructions from competitors, ensure parties who own the resources adhere to energy cooperation policies, and protect and expand the nation's oil interests. The "protect" issue usually involves the use of the armed forces, either traditional or non-traditional (such as peacekeepers). The methods to influence nations include forming a military alliance with the resource-rich nation, maintaining good political and economic relationships with the nation to protect one's crude oil interests, and raising the level of oil development technology and recovery efficiency.

Sun and Wang note that nations that want another country's resources are inclined to take risks. If China offers support and protection to a resource-rich nation, then other countries with an interest in these same resources may resort to confrontation with China. Strategic judgment must be used in balancing the pros and cons of offering protection or not offering it. Sun and Wang believe that Chinese actions in Sudan demonstrate an aspect of this paradox. In 1995 Sudanese President al-Bashir asked China to help develop its oilfields. The initiative was prescient since the United States pulled out of Sudan the following year (the authors did not say WHY the US pulled out and imposed sanctions on Sudan). By 1999 the Chinese had put its first overseas oilfield officially into production mode, and it continued to win contracts for new developments in Sudan over the next five years. In 2005 a subsidiary of China's CNPC

began off-shore prospecting and entered Sudan's natural gas sector as well. Today, a little over a decade of effort has resulted in the CNPC creating a complete and comprehensive oil industry "covering production, refining, transportation, and sales and marketing. CNPC's projects in Sudan have become the company's largest and most profitable projects in Africa."<sup>177</sup> Thus, while not engaging the United States in direct confrontation, in this case China took advantage of US policies.

Both China's technological and political support of Sudan lie at the heart of its success story. Regarding technological advances, the authors state that China has built the world's first delayed coking facility for processing high-calcium and high-acid crude oil; and with another technology it can remove sand from oil and overcome problems caused by high levels of calcium, acid, and stickiness. CNPC has also made twelve times the number of oil field discoveries than Occidental Petroleum made in a similar time frame, according to the authors. Politically, China has supported Sudanese sovereignty in the face of international pressure over the Darfur issue. In 2007 China became the first country to put forward a dual-track strategy of parallel progress, combining the search for a political solution with peacekeeping operations. China does not approve of the involvement of the International Court of Justice, nor does it support internationalizing the Darfur issue. Finally, China opposed the imposition of sanctions on Sudan. Sanctions would only lengthen and worsen the conflict, in China's opinion.<sup>178</sup> Thus, China's approach is the inverse of the US focus on human rights and sanctions for events such as Darfur.

Concluding their remarks, Sun and Wang note that every large nation's oil interests are enhanced if the nation can lower any resistance from its competitors and win the support of the country owning the resources, and then stabilize and expand its oil development interests in the country it is occupying. Limited diversion is a strategy for sharing overseas oil interests. It is the ideal and most realistic choice, Sun and Wang state, because it is a gradualist approach that can ease any strategic misgivings of the resource owner. In fact, the authors state that such an approach was not used when CNOOC attempted to buy Unocal outright. It might have been better just to buy some Unocal shares. The other two strategies—limiting profits and exploiting contradictions—effectively diffuse obstructions from China's rivals. Among other strategies that China may use to increase influence in a resource-rich area are providing the resource owner with security protection and maintaining a good economic and political relationship with the owner. China's energy diplomacy also relies on maintaining a close trading relationship with the resource owner and raising the level of oil exploration and recovery technology in the owner's country.<sup>179</sup>

The shortcoming in China's current situation is its lack of strategic influence, in the author's opinion. They finished their article noting that "fundamental to any effort to boost and enhance China's ability to obtain overseas oil interests is the expansion of China's strategic influence so that even more countries voluntarily support China's policies and so that we can prevent other countries that desire to

damage China's interests from achieving their objective."<sup>180</sup> Therefore expect Chinese attempts to expand their influence to continue to develop.

### **Transporting Oil: The South China Sea Issue Heats Up**

In past decades, the Chinese Navy's activities have been surrounded by the United States with layers of "island chains" and its energy security is controlled by the United States and other marine powers. This fact makes Chinese people concerned. In the past two days, eleven warships of the Chinese Navy sailed through the restriction of the "first island chain" from international waters to "deep blue." This news quickly became a favorable topic discussed by the Chinese people...<sup>181</sup>

A current contention between China and a host of other countries (Vietnam, Philippines, Malaysia, etc.) focuses on the issue of sovereignty over strategic maritime passageways in general and over territories of the South China Sea in particular. This section discusses the issue of strategic maritime passageways from China's perspective and the issues that confront it in the South China Sea. Included in the discussion are responses from Chinese scholars, government officials, and military personnel. The essence of the discussion is that China's strategy must rely on bilateral discussions to solve these issues and not on the use of international courts and multilateral talks; must be ready to employ military force if diplomatic talks fail; must win the international media battle for influence over public opinion at home and abroad about the correct position and right of China's concerns and its judicious approach; must limit concessions; and must limit or neutralize US moves (US reconnaissance missions in the area of the South China Sea, military exercises with China's neighbors, etc.) in the region. The discussion covers the year 2010 to the present.

One of the more recent and useful Chinese articles on maritime passageways was a **2010** article that appeared in *China Military Science*. Author **Liang Fang**, a senior colonel at NDU's Strategy Office for Teaching and Research, outlined the historical importance of strategic maritime passageways and how their control enabled the United States to become a world power. For China, he added, energy production is now located in regions separate from the mainland, thereby making transport a key security issue. Without a doubt, Liang added, "safeguarding the security of strategic maritime passages is one important aspect of fighting for and controlling strategic resources."<sup>182</sup> Sea supremacy for sea powers such as the United States was the result of their ability to control maritime communication lines and strategic passages while establishing maritime hegemony. Liang implies that China's view of **objective** reality is that the nation cannot supply its own energy needs and must build a naval force to secure safe passage for the products they require.<sup>183</sup>

Further, Liang adds that the "law of distance attenuation" in geography (the farther the distance from a target the less control over it) demands that the development of technologies, the development of regional and global alliances, and the development of overseas bases become increasingly important ways to help control and lessen the distance factor. Bases in general also serve as a strategic deterrent factor



and allow for fast reaction capabilities to protect important passageways. Finally, bases protect a nation's interests and enable the protection of straits, waterways, and even open seas. Liang then states that three factors allow for the acquisition of sea supremacy in the modern age:

The first is relying on land bases, the second is relying on island bases, and the third is relying on aircraft carriers. Of these, islands have the functions of both land bases and aircraft carriers. They are both an unsinkable aircraft carrier and an extension of land bases out in the deep sea; they can greatly expand the range of sea control. For the most part, islands must be occupied first for [protection against] offensives against the mainland. Islands are also a protective screen for the mainland, being on guard against invasion from the sea.<sup>184</sup>

Islands are relay stations and stepping stones. They figure into a nation's **geostrategy** and receive consideration when examining national interests. In that regard islands are like small countries. Major powers frequently try to bring smaller countries located near strategic passages under their influence. Such arrangements work for both countries; the larger country receiving the basing it requires and the smaller country receiving added security protection.<sup>185</sup> For several of these reasons China has focused its diplomacy on attaining control of several islands (Spratlys, etc.) in the South China Sea.

**Cao Wenzhen**, who is associated with the Law and Politics School of Ocean University in China, added another **2010** opinion to the strategic passageways discussion. He highlighted the continuing importance of geopolitics in the age of globalization. The geographic location of strategic resources and the continuing importance of trade and supply routes almost guarantee that **geostrategy** and geopolitics are two topics that will be with us for a long time to come, in his opinion. For example, as China becomes a sea power there will be a corresponding impact on the **geostrategy** of the US, whose only bases in the region are in Japan, South Korea, and Diego Garcia. Chinese Major General Luo Yuan defined sea power as "a country's ability to control oceans by means of military power, of which the strength of its navy is the most direct embodiment, while what image a navy presents when safeguarding its sea power depends on the country's clear positioning of its navy's functions and definitions."<sup>186</sup> Wang Yizhou, a Vice Dean at the School of International Studies of Beijing University, stated that "it can be predicted that in the future the Chinese Navy would have increasingly bigger formations to go beyond the 'first island chain' with increasingly advanced equipment to conduct exercises so as to protect China's maritime passages and preserve international peace."<sup>187</sup> To counter China, Cao believes the United States is attempting to build an island chain of deterrence from Japan and South Korea in the north, "through the Taiwan Strait, the South China Sea, the Philippines, and Singapore in the middle to Australia in the south."<sup>188</sup>

**Yang Zhen** and **Zhou Yunheng**, two PhD students at Fudan University's School of International Relations and Public Affairs, offered a contrasting **2011** view to the importance of sea strategy. They wrote about the growing conflict between the United States and China over sea power. With regard to relations with the United States, the authors suggested reasons that either conflict or cooperation could

evolve from the confrontation. For conflict, he noted that the two countries have different strategies, national interests, and ideologies. For cooperation, he noted that the rise of nontraditional security issues and the deepening of integration and mutual reliance on one another have offered more room for mutual agreements. The United State's strategic goals are now simply maintaining dominance instead of seizing dominance, as well as hindering China's growth. The United States wants unhindered power on the sea, a goal that China is challenging. China is a world trade power that increasingly relies on a secure and stable global maritime system. Ensuring the security of transportation routes from Africa and other nations is of supreme importance. To effectively control the sea China must increase its maritime strength and develop its sea power. In the mid 1980s China proposed a strategy of coastal water defense, which is a strategy of regional defense.<sup>189</sup> Now, due to the increased importance of transportation routes, China must expand this strategy beyond the immediate region.

The conflict between China and the United States over sea power is increasing in intensity, scale, and key areas. With regard to key areas, the South China Sea is one of the most important, in the authors' opinions, for several reasons. First, several international maritime routes cross this area, to include China and Japan. Second, the internationalization of the Nansha (Spratlys) problem is becoming more acute. Third, the South China Sea area is vast and is even home to some Chinese nuclear submarine bases. Finally, the area will be home to the Wenchang Aerospace Launch Center (Hainan Island), making US control of the area a way to deter China's secondary nuclear attack strength. **Objectively**, the role of armed conflict as a tool to protect national interests between great powers has declined. **Subjectively**, both nations are working hard to avoid a large scale conflict. Military engagement exercises and the development of a US-China hotline have helped this endeavor. Hopefully more work will occur between the nations over issues such as maritime terrorism, ecology, the spread of disease, trans-national crime, narcotics smuggling, illegal immigration, and piracy. However, sea supremacy is but one aspect of contemporary comprehensive supremacy. Now space and electromagnetic supremacy are as important, if not more so, than sea supremacy.<sup>190</sup> Perhaps for this reason China is so focused on developing its system of systems operational capability.

The products China requires to ease some of its energy needs are located far from its shores. Nearly 70 percent of China's foreign trade volume is now realized through maritime transport. Reacquiring lost territory (i.e., Taiwan) also requires sea access, according to Cao. Thus China must depend on sea routes for both economic and strategic reasons. To prevent the United States from blocking Chinese access to either of these strategic targets China must continue to modernize its military, especially its naval forces. A major power, Cao notes, combines actual strength with **geostrategy** and the application of force at key strategic points. Sea supremacy is now a **geostrategic** objective that will be used to get parties to cooperate with the principle of "setting aside sovereignty and jointly developing."<sup>191</sup>

China's future will be decided by applying the proper set of tools to its perception of **objective** reality and not by listening to "people's peace-loving subjective desires."<sup>192</sup> The country must develop issues of mutual trust with the United States while simultaneously preparing for the worst to avoid being caught unprepared.<sup>193</sup>

In May **2011**, reporters **Wen Zhizhong**, **Tang Anhua**, and **Sun Bingxiang** reported on a Guangzhou Military Region meeting with various commanders. They discussed the importance of the strategic opportunity that currently lies before the Chinese. Commander **Xu Fenlin** of the military region noted that the military must continuously take **development** as the primary requirement in this **strategic opportunity period**. **Development** must take place around the national sovereignty and security aspects of the international situation. National unity and territorial integrity are **core interests** of the state, Xu noted, and a long-term **development strategy** will enable the attainment of the initiative in world affairs. Enhancing deterrence through enhanced operational capabilities such as the system of systems capability is an achievable goal and one that will make the force capable of performing diversified military tasks. The Guangzhou Military Region lies next to the South China Sea, and China must, in Xu's words, "truly build this strategic direction into the motherland's harmonious and tranquil southern frontier making it as impregnable as bedrock."<sup>194</sup>

Author **Xu Zaihua** continued the South China Sea discussion in a **2011** *Jiefangjun Bao* Online article. He noted that a marine strategy with Chinese characteristics is needed to win the current fight over marine resources and passageways. The task of China's naval forces is to make preparations for actual military struggles; safeguard the country's resources and islands; strengthen control over important straits; and protect the safety of maritime transportation lines. Further it is necessary to integrate civilian and military resources and develop the capabilities for maritime transportation support using system of systems operations based on information systems.<sup>195</sup>

Clearly, these opinions from Liang, Cao, Xu Fenlin, and Xu Zaihua indicate that China is intent on making its navy both powerful and capable of protecting its sea lanes for economic and historical (Taiwan) reasons. China realizes that at the present time the United States controls much of the strategic passageways around the country. This arrangement works fine in peacetime, the analysts note, but it also allows the United States to control China if a conflict erupts. China wants to change this equation in its favor.

In drawing up its strategy for the South China Sea, **Zhu Chenghu**, a professor at NDU, stated that the effort should be led by the China Institute for Marine Affairs under the State Oceanic Administration. Other agencies, namely the military, the Ministry of Foreign Affairs, the Ministry of Public Security, the Ministry of Commerce, the Ministry of Agriculture, and the Ministry of Transport, Customs, and Coastal Provinces should also participate in the discussion. The issues of territories, the

demarcation of sea borders, and maritime rights and interests should be incorporated into the discussion. Other nations in the region, in Zhu's opinion, are turning the South China Sea into "an ATM machine" as they plunder oil resources, open up areas to tourism, and claim land. To counter these moves, China should explore for and extract oil and natural gas off the Nansha (the Chinese name for the Spratly Islands) Islands; open the islets to tourism; make full use of the UN mandate to expand existing facilities on the Yongshu Reef, and strengthen its research in various fields, turning it into a UN research center; strengthen exploration and investigation in the South China Sea waters; and strive for greater discourse over the fate of the region. With regard to the latter issue, an information briefing mechanism should be established that will update academic institutions on recent happenings. Finally, Zhu notes that China "has indisputable sovereignty over the South China Sea despite the fact that China is the first to propose a joint development..."<sup>196</sup> China must understand that other nations believe they too have several sovereignty claims in the South China Sea that are backed up historically.

Chinese scholars have offered a number of opinions on how China should treat challenges to its interests in the South China Sea. In another **2011** article summarized below, seven authors were interviewed. Their ideas are varied and worth of consideration:

- **Zhou Fangyin**, Chief of the Editorial Office of "Contemporary Asia-Pacific Studies" of the CASS Institute of Asia-Pacific Studies: China should no longer make concessions or try to freeze talks or shelve disputes. Rather, China must never be ambiguous on matters of principle that require a firm stand.
- **Li Jinming**, Professor with the Research School of Southeast Asian Studies at the School of International Relations, Xiamen University: first, public opinion must be enlightened and propaganda on the South China Sea issue should be distributed. Articles should be published in foreign English-language journals. Seminars on the South China Sea issue should be convened to gain the initiative over world opinion. Foreign companies should not be permitted to explore for oil in the South China Sea. We should not allow the South China Sea issue to become international or multilateral.
- **Li Guoqiang**, Deputy Director and Research Fellow at the CASS Borderland History and Geography Research Center: there are only diplomatic, military, and legal approaches to the South China Sea issue. If all parties agree to the Declaration on the Conduct of Parties in the South China Sea a diplomatic agreement is possible. However preparations should be made to recover the occupied islets and reefs at an appropriate time if diplomatic matters don't work out. The United States must be kept out. As a strategy that could be employed against the United States, if a US company participates in oil exploration then strategically it "may face tremendous losses in its interest as well as its future development in China and may even face sanctions."
- **Rear Admiral Yin Zhuo**, military expert: territorial divisions and the sovereignty of islets and reefs is the core of the South China Sea issue. Only when a country "has sovereignty over islands and reefs would it be entitled to territorial waters and an exclusive economic zone." Some countries professing to have such rights in actuality do not.

- **Ye Hailin**, Chief of the Editorial Department of South Asian Studies of the CASS Institute of Asia-Pacific Studies and Special Commentator of *Guoji Xianqu Daobao*: China's media have not gone beyond the stimulus-response model. We are only adept at following up on the reports of others and responding with statements. The media must create topics regarding what China should do in the critical South China Sea area. The media must let people know that a peaceful development may not work.
- **Gao Zugui**, Professor at the Research Center for International Strategic Studies at the Central Party School: China must not allow the United States to become the arbiter over the future direction in the South China Sea. China is stronger now and this implies that neighboring countries will be more anxious and insecure. We must not allow our neighbors to undermine the stable framework that China has built with ASEAN. New discoveries may await us if we use the perspective of regional or national strategy.
- **Xu Ke**, Assistant Professor with the Institute of Nanyang Studies at the Institute of International Relations, Xiamen University: China must move out of its current passive position and look for other ways out and seek a new starting point. Combating pirates in the South China Sea can be a starting point, for example.<sup>197</sup>

A 2011 CCTV interview with **Yin Zhuo** and **Ye Hailin** provided an opportunity for these gentlemen to expand a bit on their views. Yin stated that of the 50-plus inhabitable islands in the South China Sea China controls only eight. Claims over the islands increased in the 1970s when oil was discovered in the region. Ye stated that China should attempt to differentiate between those ASEAN members who are willing to cooperate with the mainland versus those who try to seek every possible (economic, strategic, resource, etc.) advantage at China's expense. If concessions are made then other nations will be more provocative as well.<sup>198</sup>

The authors of the seven interviews listed above (the three reporters) stated that China is intent on conducting a "People's War in the ocean," using military maneuvers in the South China Sea to show its neighbors that China exercises full sovereignty over the area. The security of Mischief Reef and sovereignty over the Nansha Islands within the nine-dotted line are the areas of current concern. With regard to the line, three other authors (**Liu Bin**, **Zhang Lu**, and **Fang Shuo**) wrote the following in 2011:

Why China's boundary line in the South China Sea is called the nine-dotted line can be dated back to 1947 when the Territorial Administration Section under the Ministry of the Interior of the Chinese government plotted an undefined line made up of eleven dotted-lines on the Location Map of the South China Sea Islands published by it. The government of the People's Republic of China also has plotted a line in the same position on maps published by it but revised the eleven dots to nine dots.<sup>199</sup>

These reporters wrote that China's military presence in Nansha includes the South China Sea Fleet, which is also stationed at Zhubi Reef, Nanxun Reef, Yongshu Reef, Chigua Reef, Dongmen Reef, and Huayang Reef. More than ten departments are currently exercising marine law enforcement at this time. There are five specific forces involved in this effort: the Maritime Police of the Border Control Department under the Ministry of Public Security; the Marine Surveillance Teams of the State Oceanic Administration under the Ministry of Land and Resources; the China Maritime Safety Administration under the Ministry

of Transport; the Chinese Fishery Administration of the Fishery Bureau under the Ministry of Agriculture; and the Anti-Smuggling Police of the General Administration of Customs. Unfortunately the coordination among them is weak, according to the reporters.<sup>200</sup>

The reporters state that the only agreements with regard to the South China Sea dispute are the United Nations Convention on the Law of the Sea, passed in 1982, which is the basis for the 200-nautical-mile exclusive economic zones along the coast of neighboring countries; and the Declaration on the Conduct of Parties in the South China Sea in 2002, where signatories agreed to “exercise self-restraint in the conduct of activities that would complicate or escalate disputes.”<sup>201</sup>

At the moment, the fishing industry has become a major point of contention among parties to the dispute. Fishermen from all nations are casting their lines in waters that are contestable with certain of their neighbors. Chinese fishing boats are required to install Beidou satellite positioning systems so that the Chinese government and patrol boats will know where they are located at all times.<sup>202</sup>

In a wide-ranging **2011** CCTV interview other regional and military experts offered their opinions on the South China Sea issue. **Rear Admiral Zhang Zhaozhong**, the well-known military expert and professor at NDU, states that a recent US-Vietnamese military exercise was unprofessional and a publicity stunt. **Jin Canrong**, Deputy Director of the International Relations Institute at Renmin University, stated that Vietnam intends to use the United States as its “big brother,” since it is the only way for the country to engage in a show of force. Jin, due to the United State’s domestic woes, regards America as an undependable ally. A video clip is then shown of joint exercises between the United States and Malaysia, Indonesia, the Philippines, Brunei, Vietnam, Singapore, and Thailand. Zhang believes these exercises are designed to show US support for these nations over the South China Sea issue, while the real aim is to contain China. This is the United State’s main goal, in his opinion. He notes that Singapore and the Philippines are likely future military installations for the United States. Japan is also very interested in the South China Sea because it serves as the passageway for Japan’s energy needs.<sup>203</sup>

There are four misunderstandings regarding China’s policy on the South China Sea, according to **Xing Guangmei**, a Beijing scholar writing in **2011**. First, China does not claim sovereignty over the whole of the South China Sea waters.<sup>204</sup> China declares sovereignty only if necessary but never advocates the use of arms. China is devoted to advancing ties with all regional actors.<sup>205</sup> Its claim has three points:

- (1) China has sovereignty over all the reefs and territorial seas in which they are located, within the nine lines of demarcation. China’s Declaration of the Territorial Seas (1958), Law on the Territorial Seas and Contiguous Zones (1992), and the diplomatic statement that “China has indisputable sovereignty over the South China Sea islands and adjacent waters” provide a legal basis for such claims.
- (2) China enjoys sovereignty and exclusive jurisdiction over the exclusive economic zone extending 200 nautical miles from the territorial sea baselines along the continent and the territorial sea baselines of qualified islands and the continental shelf

- extending not more than 350 nautical miles within the nine lines of demarcation as a signatory of the United Nations Convention on the Law of the Sea (1982).
- (3) According to the provisions of the 1982 Convention and Law on the Exclusive Economic Zone and the Continental Shelf (1998) concerning historic rights and the relevant rulings of the International Court of Justice, China enjoys priority in such historic rights as fishing, freedom of navigation, and maritime administrative law enforcement in waters outside China's exclusive economic zones but within the nine lines of demarcation.<sup>206</sup>

Second, China has the right to take back occupied reefs with force or by peaceful means. Third, there should be no outside intervention in solving the South China Sea issue. Bringing in powers from outside the region will only increase their appetite for interests and will harm trade contacts. Finally, exploitation in cooperation with China will alleviate contradictions. Those who want to intensify contradictions will suffer the consequences.<sup>207</sup>

Professor **Zhang Zhengwen** of the Nanjing Army Command College issued another **2011** hard-line approach to solving the South China Sea issue similar to Xing Guangmei. Zhang noted that the establishment of moral principles, credibility, rules, and "awe" are required as countermeasures. The South China Sea is one of China's **core interests**, in his opinion. This means that on issues of principle there is no room for compromise. China should increase its military presence and form a strong deterrent force so that other countries will not try to cause trouble in the region. If necessary, China should launch punitive attacks when provoked and safeguard China's sovereignty over the South China Sea. If the issue is to be settled once and for all, dialogue and negotiation should be tried first followed by judicial proceedings. If these fail then force should be used.<sup>208</sup>

In contrast to these hard-line approaches there were softer suggestions. One suggestion appeared in a **2011** article by **Kuai Zheyuan** who noted that there are three keys to solving the South China Sea issue. They are to acknowledge the presence and interests of the United States in the South China Sea; to allow ASEAN to know that China will not threaten ASEAN but will protect its safety on land and in the South China Sea; and to bring peaceful solutions to disputes over the South China Sea with Vietnam, the Philippines, Malaysia, and Brunei through bilateral negotiations.<sup>209</sup>

### **Rare-earth Elements**

This section looks at an internal Chinese strategic resource, rare-earth elements, a product for which China leads the world in the extraction and processing. The section will examine the rationale behind China's decision to limit rare-earth production and exports in the past few years and the strategies of China to manage rare-earth elements.

According to Chinese sources, the country has been developing its rare-earth industry since **1968**.<sup>210</sup> US rare-earth expert Cindy Hurst notes that rare-earth elements (REE) are "those chemical elements on the periodic table having atomic numbers 57 through 71 (known as the lanthanides),

scandium, and yttrium (atomic numbers 21 and 39).”<sup>211</sup> These elements are not rare but are difficult to find in high enough concentrations to make them economical to extract from the earth’s crust. They are used, according to Hurst, in “hundreds of high-tech applications, including critical military-based technologies such as precision-guided weapons and night-vision goggles.”<sup>212</sup> In **2011** *The New York Times* listed the rare-earth elements found in a Toyota Prius: diesel fuel additives (cerium and lanthanum); UV cut glass (cerium); glass and mirror polishing powder (cerium); LCD screen (europium, yttrium, and cerium); sensors component (yttrium); hybrid electric motor/generator (neodymium, praseodymium, and dysprosium, terbium); headlight glass (neodymium); 25+ electric motors throughout the vehicle (neodymium magnets); catalytic converter (cerium and lanthanum); and hybrid NiMH battery (lanthanum and cerium).<sup>213</sup>

The Jiangxi, Fujian, Guangdong, Hunan, and Guangxi Zhuang regions are the areas in southern China that are rich in medium-heavy rare-earths. The ion-absorbed rare-earths, or medium and heavy rare-earths, are more valuable than lighter rare-earths found in the north, due to their scarcity and wide use in more advanced technologies, according to Lin Donglu, Secretary-General of the Chinese Society of Rare-Earths.<sup>214</sup> Most of the mining licenses for rare-earths in Jiangxi Province are owned by Ganzhou Rare-Earth. The Aluminum Corporation of China Ltd (Chinalco) is set to take a controlling stake in the state-owned Guangxi Nonferrous Metals Mining Group. Along with the Griem Advanced Material Company the three will together form a joint venture to develop rare-earth resources owned by the Guangxi Rare-Earth Development Company.<sup>215</sup> Northern companies are also being consolidated. A 2011 report notes that the Inner Mongolian Baotou Steel Rare-Earth High-Technology Company is aiming to consolidate thirty-five rare-earth mining operations by June.<sup>216</sup> The Baotou Rare-Earth Development Zone (built in 1990) in Inner Mongolia, north China, is the primary location for rare-earth resources in China. In **1997** there were close to 145 domestic and overseas companies located there.

In **1998** China had 36 million tons of proven reserves of rare-earth, nearly 80 percent of the world’s total.<sup>217</sup> It was number one in the world in rare-earth output and had nearly 6,000 people involved in research. Their work has resulted in the introduction of rare-earth into the metallurgy, machinery, oil, chemical, textile, and light industry sectors. Export volume surpassed 30,000 tons in 1996, which was some 65 percent of the world market.<sup>218</sup> Today, the US Geological Survey (USGS) believes that China has 55 million metric tons of reserves or some 48 percent of the world’s reserves.<sup>219</sup> China undoubtedly has many more researchers of rare-earth than the 6,000 employed in 1998.

In **1999** the State Development and Planning Commission of China proposed four measures to promote the rapid growth of rare-earth products: to exploit deposits in a rational way (to protect China’s riches in Baotou and in southwest China’s Sichuan province); to expand rare-earth marketing and applied technologies (permanent magnet materials, permanent electric motors, etc.); to restructure China’s rare-



earth industry and reorganize its assets for better product mix; and to reap better economic returns by relying on science and technology.<sup>220</sup> That same year the Land and Resources Ministry of China decided to restrict the further exploitation of rare-earth elements by halting or sharply cutting the issuance of new mining licenses.<sup>221</sup> Perhaps this was because in 1998 China had exported 44,000 tons of rare-earth, almost one and a half times its export rate in 1996. This was 70 percent of the world's total consumption, while China's domestic market only consumed 15,000 tons. At the same time China continued to encourage foreign investment into the processing of rare-earth.<sup>222</sup>

There are a number of rare-earth enterprises in China, with some sources reporting as many as 130 companies.<sup>223</sup> While not specified, it is believed the majority are mining and not processing companies. In **2002**, North China's Inner Mongolia Autonomous Region announced a plan to build a "Rare-Earth Valley" in Baotou city. The project would consist of five parks: education, science and technology, pioneering, industrial, and logistics. More than half of the income from the park is expected to be generated by the rare-earth industry.<sup>224</sup> In **2004** the China Southern Rare Earth (Group) Corporation was cited as a key rare-earth firm that had merged some twenty companies, to include the Jiangsu, Guangdong, Jiangxi, and Hunan Provinces and Shanghai; and the China Northern Rare-Earth (Group) Corporation was a merger of producers from the Inner Mongolia Autonomous Region, Gansu, Shandong, and Sichuan Provinces in which the Baotou Steel and Rare Earth Company will have ninety percent of the rare-earth reserves. Thus, there was a huge movement to merge many rare-earth producers into a few larger organizations. State legal entities will have a controlling stake in both. Two large companies, the Gansu Rare-Earth Corporation and the China Rare-Earth Holdings based in Jiangsu Province and Hong Kong, declined an invitation to join the two conglomerates. This is not surprising since the government plans to grant export quotas for the two groups. Further, the government has stated its intentions not to grant new licenses to other companies within three years of the launch of the two big groups, and they intend to speed up efforts to ban those rare-earth plants without government-issued mining licenses.<sup>225</sup>

By **2007** Chinese analysts were calling for more strategic uses of rare-metal and rare-earth elements. Some of the actions requested were:

- Establish an operating mechanism and system for developing mines that both meet market economy requirements and standardize the development of mineral resources.
- Improve the strategic material reserve system in the country.
- Predict the supply and demand status of strategic materials.
- Accelerate site inspections and the development of rare metal resources.
- Expand channels for gaining resources and utilizing these resources.
- Allow newcomers to act as coordinators and managers, especially organizations such as China Rare-Earth Industry Association.<sup>226</sup>

The following suggestion was also put forward, and it appears to be the most realistic (and aims to be the most manipulative):

In order to safeguard national security and accelerate the sustainable development of the national economy, we should attach great importance to rare metal resources from a strategic perspective and we should improve our ability to use our dominance of rare metals to enhance our influence in the international community and improve our ability to regulate the market so as to gain a bigger voice in the international community. In addition, we must make it clear that rare metals are a valuable trump card held by our country. We should promote resource-based diplomacy, particularly with Japan and the US.<sup>227</sup>

Another **2007** Chinese tactic was to prevent companies from selling rare-earth elements too cheaply. A 15 percent export tax on rare-earth elements was imposed. Earlier China had cancelled a tax rebate policy on rare-earth elements, but export volumes continued to rise, forcing the government into the export tariff plan.<sup>228</sup> In **2009** the European Union and the United States jointly complained to the World Trade Organization about China's export tariffs and restricted quotas on rare-earth materials. Such measures provided Chinese industries with a substantial competitive advantage in the rare-earth market. China, for its part, defended its policies and said it would consult with the concerned nations.<sup>229</sup> An economist in Shanghai wrote that China's decision to limit rare-earth elements is not the same as imposing a ban on them. However, the analyst offered some advice as well. He believes China should set limits to the export of its national strategic resources and increase as much as possible the export of finished goods.<sup>230</sup> Protecting rare-earth resources and the environment helps insure that China's economic sovereignty remains intact.<sup>231</sup>

Meanwhile, rare-earth industry downsizing continued. In late **2008** China proceeded to construct the China Minmetals Rare Earth Company, which aimed at becoming the largest global rare-earth enterprise in the world within five years. The Ganzhou-based company was a subsidiary of China Minmetals Corporation and two private companies, the Hongjin Rare-Earth Company and the Dingnan Dahua New Material Resources Company.<sup>232</sup>

In August **2009** the Chinese Ministry of Industry and Information Technology (MIIT) published a "Revised Program for the Development of Rare-Earth Industry 2009-2015." The article deemed MIIT the main policymaker and regulator of China's rare-earth industry. The program was necessary to manage and regulate the more than 1,000 rare-earth deposits in China. The program divides China's rare-earth mines into three zones. The South Zone covers Jiangxi, Guangdong, Fujian, Hunan, and Guangxi; the North Zone covers Inner Mongolia and Shandong; and the West Zone covers Sichuan. For the 2009-2015 period, light rare-earth elements will be extracted from Inner Mongolia and Sichuan and, potentially, Shandong. Heavy and medium elements will be extracted from Jiangxi, Guangdong, and Fujian. The program indicates that the state will not grant new mining rights, ratification will be provided by MIIT and not a provincial-level authority, and city-level government agencies will not have the right to approve

rare-earth applications and processing enterprises.<sup>233</sup> One source in 2009 even indicated that China's rare-earth reserves had fallen from 85 percent of the world's total to 58 percent.<sup>234</sup>

Rare-earth elements, of course, are viewed as a strategic trump card in some Chinese circles. A **2010** article, for example, indicated that should US companies participate in arms sales to Taiwan, then China, backed by legislation, could ban rare-earth element sales to the US. China also has indirect options, such as imposing tariffs on US parts suppliers who want to enter the Chinese market or simply deny them access. China could also enter into destructive competition against US companies on international markets. Still, reducing rare-earth quotas seems to be the way to really strike back against the United States.<sup>235</sup> There have been other points of contention and stress with the United States, however. In **2003** for example, the Gansu Tianxing Rare-Earth Functional Materials Company was involved in the illegal acquisition of Terfenol-D, used in US naval and aerospace sensors and weapons, through the espionage efforts of Chinese students living in the United States.<sup>236</sup>

China has already used rare-earth elements as a bargaining chip from a Western perspective. In the autumn of **2010** a Chinese fishing boat collided with a Japanese Coast Guard boat. This happened in the Senkaku Islands in the East China Sea and the incident was filmed by one of the Japanese Coast Guard's crew. In response to Japan's decision to hold the Chinese fishing boat captain during the investigation, China halted the export of rare-earth metals to Japan, which seriously cramped the plans of the auto and other industries. China cut its rare-earth exports to Japan on 21 September **2010** and to the United States and Europe on 18 October. Beijing claims they had begun adjusting their policies before the trawler incident.<sup>237</sup> Some Chinese authors state that a quota system was in place in 1998 while in 2006 the country stopped granting new rare-earth mining licenses. In September **2010** the State Council put rare-earth companies on a merger list. Some nations accused China of monopolizing resources and using rare-earth as a means for exerting political pressure.<sup>238</sup> Chinese actions in regard to the trawler incident did one thing for sure—it sent a shock wave of concern to countries that had come to rely on China for their rare-earth supplies.

The embargo did not work well in the end for China. The stoppages triggered a harsh response from other nations. Many began to look elsewhere for rare-earth elements and some, like the United States and its Molycorp Minerals LLC at Mountain Pass, California, continued with their plans to restart old mines. The positive side is found in events such as the recent (8 August **2011**) Third China Baotou Rare-Earth Industry Forum, held on 8 August 2011. One point of discussion was whether China can enhance further cooperation between itself and foreign companies that also specialize in rare-earth elements. While China is projected to have 48% of the world's rare-earth reserves, Baotou has 80 percent of China's reserves. Meanwhile, China yearly continues to provide 90 percent of the earth's rare-earth metals.<sup>239</sup>

In **2010**, according to one US article, China produced 130,000 tons of rare-earth elements, while the United States produced zero tons. India was second with 2,700 tons, which demonstrates figuratively the world's reliance on China. According to the same article, China leads the world with 55 million tons of rare-earth reserves, with Russia second at 19 million tons and the United States third at 13 million tons.<sup>240</sup> Chinese Premier Wen Jiabao stated in October 2010, shortly after the trawler incident, that the nation will not use rare-earth resources as a bargaining chip, even though most nations had by that time already made up their minds that China had done so. The *China Daily* Online attempted to explain China's rationale regarding this issue. It noted that rare-earth elements must be cut and prices raised due to environmental problems that stem from producing 90 percent of the world's needs and from the proliferation of small rare-earth companies in China that have allowed the business to sell rare-earth at very low prices at the expense of added pollution. These two elements, over-exploitation and poor mining habits, have caused China to reduce the number of companies and set state prices and quotas. The nation is also implementing restrictions in accordance with laws and regulations. Meanwhile, other large industrialized nations such as the United States are not mining any rare-earth elements and are thereby saving their reserves for a rainy day.<sup>241</sup> Further, rare-earth elements are used for military purposes and this is another reason for implementing restrictions on their export. This is a legitimate security concern for China. Chinese authors such as Jin Gaisong, Vice Director of the International Trade Department of the Chinese Academy of International Trade and Economic Cooperation, state that this tactic (limiting sales from Western countries to China for security concerns) has been used against them repeatedly.<sup>242</sup>

According to a report in **2011**, the Chinese government is setting rare-earth-element quotas based on rare-earth output, market demand, and the need for sustainable development. This system is needed. Between 1996 and 2005 rare-earth exports increased ten times and the price dropped 36 percent. In 2009 China had only 36 percent of the world's rare-earth reserves, as compared to 43 percent in 1996. Today China is closing hundreds of smaller mines (the Ganzhou production base in Jiangxi Province once had 1,035 licensed mines) and imposing a 15-20 percent tariff on rare-earth exports.<sup>243</sup> Prices are skyrocketing. An average ton of rare-earth exports cost \$36,297 in January 2011, but by March the price was \$68,305.<sup>244</sup> Japan has had to increase the price of its domestically produced rare-earth magnets, one of its main products, since the prices of neodymium and dysprosium, the key raw materials in the magnets, have risen sharply over the past few months. Simultaneously, Japan is trying to keep its auto and electronics industries from being held hostage by Chinese pricing. It has produced a series of actions to thwart such Chinese moves.<sup>245</sup>

China's rare-earth strategy appears to be composed of several aspects: first, China seems intent on producing more finished products in the rare-earth field and getting Western nations to buy them instead of raw rare-earth elements. This will provide more income for China and produce more jobs. The

nation is focused on developing the entire industry chain in a strategic manner, according to Chinese Rare-Earth Society Secretary-General Lin Donglu.<sup>246</sup> Second, China is interested in inviting foreign high-technology companies to move to China to set up shop and thereby be closer to rare-earth resources (but also become another input for the job market, as well as a potential Chinese takeover objective). In 2009, General Motors established the headquarters of its international operation in Shanghai.<sup>247</sup> Chen Zhanheng, director of the Chinese Society of Rare-Earths, noted that rising rare-earth prices could force some industries to transfer from Japan to places where there are rare-earths in abundance.<sup>248</sup> Third, the government is consolidating the scattered rare-earth sector in order to gain more influence over global market pricing and to pave the way for more sustainable growth. Finally, the State Council is allowing China's biggest domestic companies to dominate and lead the industry.<sup>249</sup> This is a different approach to bringing the industry under more state control than has been attempted in the past.

Simultaneously, several issues continue to go unresolved. Some regions are calling for a clear national strategy that sets exploration criteria for rare-earth reserves; for a national reserve system; and for policy incentives that boost technological innovation and application.<sup>250</sup> The State Council issued national guidelines for the development of the rare-earth industry on 19 May 2011 at [www.gov.cn](http://www.gov.cn), and several of these items of concern to the regions were addressed.<sup>251</sup> The guideline is said to raise rare-earths to the level of national strategic reserves for the first time, according to one source. *Business China* Online stated that a strategic stockpile system for rare-earths will be established (which could provide China with more power to influence global prices and supplies). The guideline is designed to handle multiple problems, to include illegal mining, environmental pollution, and a lack of centralization of the industry. The State Council added that the plan is to place 80 percent of the rare-earth industry of the south in the hands of three companies within two years. In the north, rare-earth production is already in the hands of the Inner Mongolian Baotou Steel Rare-Earth Company.<sup>252</sup> The company has announced that it will establish the Baotou Rare-Earth Products Exchange to "further regulate the market."<sup>253</sup>

On 28 May **2011** a researcher of the Chinese Society of Rare-Earths provided further details of the rare-earth guidelines. In addition to the three issues mentioned in the *Business China* release, the document was said to include twenty-two items for regulation. These items included stricter policies on waste emissions standards; regulations to curb smuggling; the implementation of production controls; laws designed to decrease the consumption rate of rare-earth reserves; the phasing out of inefficient energy consumption; the promotion of ways to improve separation, smelting, and application techniques; and the harmonization of the rare-earth industry with local economies and social development. Blame for past acts of surpassing approved output levels were laid at the doorstep of local governments that did not properly supervise private industries in the face of adequate laws and regulations according to the researcher.<sup>254</sup> Over the past few months, while export have dropped in total volume by some seventy-six

percent, the value of exported rare-earth items has increased by 214 percent.<sup>255</sup> In this sense the guidelines are providing expanded income and reducing pollution as the plan was intended to do.

One other article of interest in **2011** represents China's interest in standing on its head US arguments to prohibit the sale of high-tech items to China via export restrictions and embargoes. Author Sun Yefei detailed the rare-earth elements in US military equipment and stated that he saw no reason to sell rare-earth to the United States that might be turned into military equipment posing a threat to China. He wrote that the US Patriot missile's guidance system was composed of four kilograms of samarium-cobalt magnets and neodymium-iron-boron magnets to produce electron beam focusing; and that Patriot's control wings contain rare-earth alloys. Further, he detailed the rare-earth components of missile tail fin systems, the electric engines of some naval ships, and US armor's anti-penetration capability.<sup>256</sup>

### CONCLUSIONS: ASSESSING THE GIOPOLITICAL IMPACT

Many of the primary characteristics of the **objective-subjective** thought process are apparent as one proceeds through the discussions of national interests, the objective environment, oil, the South China Sea, and rare-earth above. The "how" to conduct strategy indicates the following. First, Chinese strategists look at **objective** conditions and reality via such criteria as the number of forces opposing them, the terrain, the level of science and technology in a country, a country's defense budget, and so on. This is more important than the "operational environment" which drives much US thought. The Chinese then use creativity and **stratagems** (**subjective** guidance) to manipulate these **objective** factors to their benefit. The goal is to attain "**shi**" or strategic advantage. Strategists are limited based on the economic conditions of the regime (social mode of production determines the type of weapons available) and military history and culture (social conditions of history that influence how force or diplomacy will be used and when).

However, when analyzing Chinese writings on oil and rare-earth, several different strategic topics pop up than those focused on **shi**, **stratagems**, and the **objective-subjective** thought process. This indicates that China has significant strategic plans and operations underway but not necessarily the type that fit easily into the three paradigms offered above. Their geostrategy appears to be flexible and adaptable and willing to disregard several issues of intense value to the West (human rights, local corruption, etc.). With regard to African oil and the South China Sea, the following strategic options emerge from the writings used for this paper:

#### Oil and strategy

- Using to China's benefit the strategic contradictions and political differences that exist between the parties that own resources and China's rivals
- Participating with international energy investment groups to create more favorable conditions (**shi**) for joint ventures

- Working to “improve local immunity” in oil communities via developing the local economy instead of the US method of killing off the “illness” through sanctions and human rights
- Working with non-OPEC members of the oil industry, which limits the number of production restrictions on Chinese investments
- Making adjustments to China’s “non-intervention” policy in reaction to **objective** reality
- Offering assistance altruistically, sending people to provide on-site training, and running joint ventures
- Offering financial assistance and taking actions that would not force the other side to make concessions
- Using technologies to upgrade facilities and advance returns on development
- Enhancing Chinese influence through the offering of security protection arrangements
- Using the strategies of limited diversion (sharing overseas oil interests, a gradualist approach that can ease any strategic misgivings of the resource owner) and limited returns
- Strengthening ties with resource owners through trade contacts
- Working to establish bilateral alliances with resource-rich countries
- Providing resource owners with security protection, such as placing peacekeepers in the region in case military force is needed to ensure the security of resources
- Taking risks
- Taking advantage of other nations policies that are driven by human rights or sanctions

#### South China Sea (transport routes) and strategy

- Establishing a military presence to create a deterrent posture over transport routes
- Developing greater resource, energy, and state diplomacy to create the political, economic, and safe external environment required for transport
- Countering what China believes is a US island chain of deterrence from Japan and South Korea to the Philippines and Singapore
- Establishing a set of coercive tools that get parties to listen to the principle of setting aside sovereignty and promoting joint development
- Making no concessions on the South China Sea issue
- Prohibiting foreign countries from exploring for oil and imposing sanctions on the United States if it does so
- Establishing a public relations offensive to enlighten people on China’s position
- Prohibiting the United States from becoming an arbiter over South China Sea issues

- Coercing all parties to agree to the Declaration on the Conduct of Parties in the South China Sea and preparing to recover islets and reefs if diplomatic maneuvering does not work out
- Focusing on an active versus passive position, such as offering to combat pirates in the area

#### Rare-earth and strategy

- Consolidating the industry to rid the country of domestic rogue rare-earth companies that mine but care little about the environment and set prices lower than state prices for sales overseas
- Implementing laws and regulations to keep the nation's supply of rare-earth plentiful
- Predicting the supply and demand status of strategic materials.
- Enhancing China's influence in the international market and improving its ability to regulate the market
- Promoting resource-based diplomacy with the understanding that rare-earth is a valuable trump card that can be played when required
- Providing China's Ministry of Industry and Information Technology (MIIT) with the ability to grant mining rights, ratify mines, and approve applications and processing inquires
- Using rare-earth as a bargaining chip (this is a US understanding of Chinese rare-earth strategy, based upon Chinese actions in the East China Sea: when a Chinese fishing boat collided with a Japanese Coast Guard boat, the Chinese boat Captain was detained, and China halted rare-earth exports to Japan until the case was adjudicated); China has indicated that rare-earth shipments could be halted to the United States if arms sales continue to supply Taiwan (Chinese Premier Wen Jiabao has publicly stated that rare-earth elements will not be used in this way, as a bargaining chip)
- Limiting world supplies, since other nations appear to be stockpiling rare-earth buys from China and putting them in their reserves for a rainy day
- Producing more finished products in the rare-earth field, so that other nations have to depend on China not only for rare-earth elements but also for finished products as well; holding hostage other nations' industries with Chinese pricing
- Inviting high-tech Western companies to move to China to produce finished products, allowing China to get a high-tech infrastructure as well out of the deal
- Bringing the rare-earth industry under state control
- Turning US strategy (based on a reluctance to authorize shipments of technical equipment to China that can be integrated into its military equipment) on its head by refusing to send rare-earth elements to the West that can be used in military equipment

China's economic rise is dependent on strategic resources, especially energy resources. In addition to core, general, and major interests, China has designated the search for strategic resources as an expression of "developmental interests," a category somewhat new to the various subdivisions of national interests. At the same time that China searches for new energy resources it must find a way to reduce its



reliance on coal and develop industries with a higher science and technology content thereby enabling it to become more “green.” To achieve this goal China plans to devote 10 trillion yuan (about \$1.5 trillion) to develop seven strategic industries over the next five years, a plan still under discussion in late 2010. These industries are alternative energies, new generation information technology, biotechnologies, high-end equipment manufacturing, advanced materials, alternative-fuel cars, and energy-efficient and environmental protection technologies.<sup>257</sup> It is hoped that the plan will help compensate for the rise in economic and environmental prices that China has paid for the dramatic rise in its comprehensive national power and people’s welfare.<sup>258</sup>

With regard to information technology, China is seeking to prepare a new grand strategy with information at the center of attention according to Zhang Xinhua, editor of the book *Information Security: Threats and Strategy*. Two areas of this strategy are the science and technology area (security and safety of digital space) and the political area, where soft power rules. Opportunities abound to improve or exploit information sovereignty, information hegemony, information permeation, information domination, and information contamination in Zhang’s opinion.<sup>259</sup> Strategic goals “can be achieved by destroying or manipulating the flow of information on computer networks to destroy an enemy’s telephone networks, oil pipelines, power grids, traffic management systems, systems for transferring state funds, systems for transferring accounts, and healthcare systems.”<sup>260</sup> This means that “the key to success may be in proficiently practicing strategic management of information capabilities. Thus what lies at the heart of grand strategy is paying attention to information security and building and applying information strategy.”<sup>261</sup>

In summary, China’s geostrategy is developing on several fronts. Some are based on the basic principles of an **objective-subjective** analysis, the use of **stratagems**, and the end goal of achieving *shi* or a strategic advantage. **Objective factors** of the international situation are analyzed and assessed and a **subjective** rendering of them results in the formulation of policies, principles, and plans. However, the methods to achieve advantage are flexible and vary in accordance with the issue under consideration, as the list of strategic objectives under each category above indicates. The issue is to find a way to attain a comprehensive strategic advantage and the main goal is to position strategic objectives within the scope of national interests. It is postulated here that these three issues (**objective-subjective, stratagems, and strategic advantage**) are present in Chinese strategic planning by implication and historical tradition.

David Finkelstein, perhaps the United State’s finest expert on Chinese military strategy, notes that new strategic guidelines for the Chinese military are issued in response to changes in the international order; to the international or regional security environment; to China’s domestic situation; and in the nature of warfare itself.<sup>262</sup> China’s assessment of its current geostrategic situation would indicate that, even though adjustments have been made since the last guidelines of 1993, new guidelines could appear

in the next year or two. The appearance of a new discussion over China's core and developmental interests support this contention.

China's needs are clear. It must acquire an abundant supply of energy to meet the requirements of its people. One of the ways is to do all it can to go to a source of oil that is not dependent on OPEC, that being African oil. In so focusing its attention on that continent, China must also secure the oil's passage through the South China Sea. Its military capabilities, especially the Navy, are being built up to support that proposition. In that sense, China's **objective** view of reality has changed since its Navy is stronger than in the past. This has resulted in **subjective** policies that will hopefully, from their point of view, provide the strategic advantage it seeks to control both the oil resource and its passage to refineries in China. Threats appear to play a prominent role as well. On 29 September 2011, Long Tao, a strategic analyst of China's Energy Fund Committee, stated in the *Global Times Online* that it was "time to teach those around the South China Sea a lesson" and that China should strike first before things get out of hand.<sup>263</sup> Minnie Chan discussed Long's article in the *South China Morning Post Online* on 30 September. Chan noted that some 2,000 internet users supported Long's view. Also of note was that an anonymous retired PLA colonel stated that war will be inevitable if the Philippines and Vietnam push China into a corner.<sup>264</sup> Thus the issue continues to get hotter and hotter.

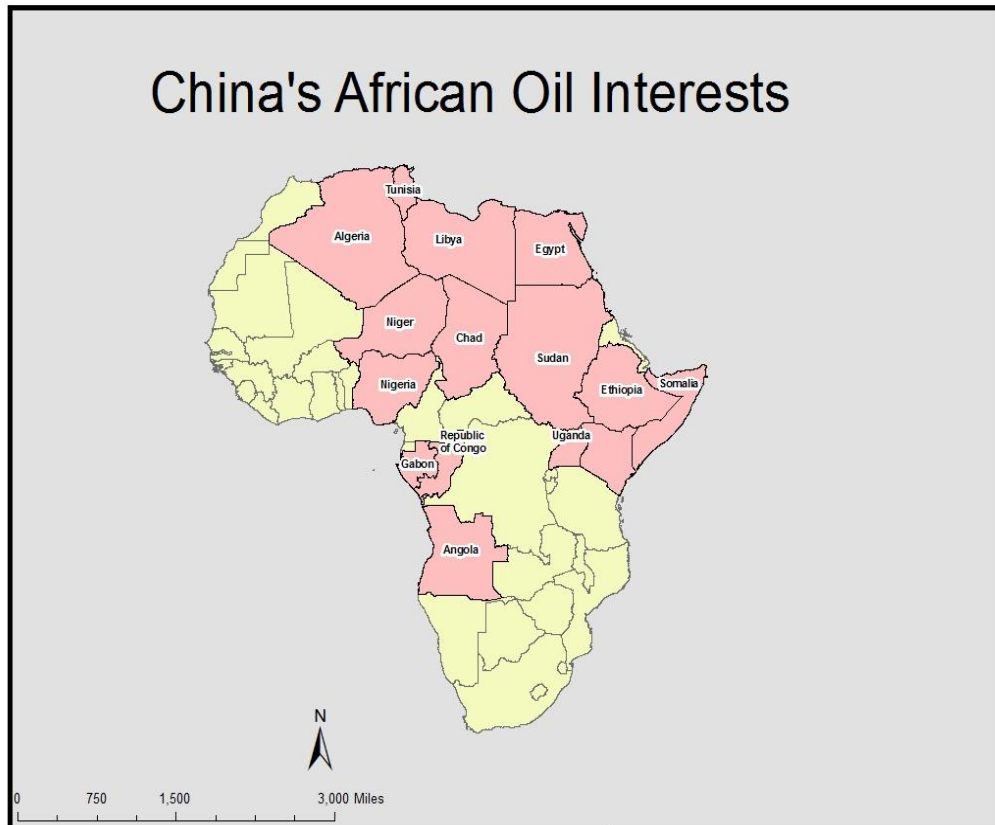
Internally, China has plenty of rare-earth elements and does not need them. However, from an outsiders view, China appears to be trying to corner the market, the pricing mechanism, and the finished product industry. Internally, China had to corner its own rare-earth companies and put the industry under state control. That has been accomplished. China lacked some of the internal capabilities to process rare-earth elements and so it has sought to bring foreign companies with such capabilities into China and thus providing access to the finished product industry.

In each case, China is focused on manipulating objective reality to fit its internal situation and to obtain a strategic advantage. Thus far China's geostrategic plan appears to be unfolding in spite of the few constraints put on it. China's geostrategic approach will require close scrutiny in the coming years as China advances further as a world power. Nations must ensure they understand China's strategy if they hope to escape being ensnared by it and subjugated to it.

## **Appendix One: Articles on Strategy from 2009-2010 in the journal *China Military Science***

- 1-2009: A Historical Analysis and Current Development of the Thought of Military Strategies
- 2-2009: A Study of National Strategic Capabilities
- 3-2009: A Study of Military Strategic Guidance in the New Period in the New Century
- 4-2009: A Comparative Study of Naval Strategies of Today's World Major Powers
- 5-2009: On the Concept that the PLA Should Establish for Strategic Projection
- 6-2009: Strategic Choices of China's Defense Economy in the International Financial Crisis
- 1-2010: There were four articles in a special section on the "Expansion of Strategic Interests in China's Past Dynasties"
- 2-2010: A Tentative Analysis of Hu Jintao's Strategic Thinking on Accomplishing Diversified Military Tasks; A Comparative Study of Clausewitz's and Jomini's Strategic Theories; Closed and Open Maritime Strategies of the Ming Dynasty and their Influence
- 3-2010: On the Development of National Interests and the Development of Military Strategy; Strategic Thinking on Safeguarding the Development of National Maritime Interests; Challenges to Space Interests and our Strategic Choices; Characteristics of China's Traditional Strategic Thought
- 4-2010: None
- 5-2010: Great Strategic Decisive Battles and Famous Historic Chapters—on the Historical Position of the Three Great Strategic Battles during the War of Liberation in 1948-1949
- 6-2010: Fundamental Strategy for Scientific Building of a Powerful Army in the New Stage in the New Century—Theoretical Significance and Practical Value in Hu Jintao's Strategic Thinking on Improving the PLA Capability in Dealing with Multiple Security threats and Fulfilling Variable Military Missions; Fundamental Strategy for Building the PLA into a Powerful Iron Army—Studying the Newly Revised *Regulations of the PLA on Political Work*; A Summary of Research on China's Grand Strategies; A Grand Panoramic Display of Military Strategic Thinking—An Introduction to *A Study of Contemporary Military Strategic Thinking*.

**Appendix Two: Map of Countries in Africa from Which China is Extracting Oil**



## ENDNOTES

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- <sup>1</sup> Li Jijun, "Military Strategic Thinking and Scientific Decision-Making," *China Military Science*, No. 1 2006, pp. 28-38.
- <sup>2</sup> Xu Qi, "Sea Geostrategy and the Development of the Chinese Navy in the Early 21<sup>st</sup> Century," *China Military Science*, No. 4 2004, pp. 75-81.
- <sup>3</sup> Ibid.
- <sup>4</sup> Ibid.
- <sup>5</sup> Ibid.
- <sup>6</sup> Ibid.
- <sup>7</sup> Ibid.
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- <sup>14</sup> Peng and Yao, p. 134.
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- <sup>18</sup> Ibid., p. 138.
- <sup>19</sup> Ibid., p. 57.
- <sup>20</sup> Ibid., p. 174.
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- <sup>62</sup> Ralph D. Sawyer, *The Art of War*, Fall River Press, 1994, pp. 143-147.
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