

**One Truth, Two Minds, and Three Tongues:
Conflicting Media Representations of the 2010 Chinese Rare Earth Controversy**

by

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Abstract

On September 7, 2010, a Chinese fishing trawler collided with two Japanese Coast Guard patrol vessels near the Pinnacle Islands in the East China Sea, a territory claimed by both China and Japan. Following the arrest of the Chinese fishermen and the prolonged detention of the Chinese captain by the Japanese maritime authority, the collision incident escalated into a diplomatic showdown between the two countries. Eventually, challenged with China's reported halting of Japan-bound rare earth metals export, vital raw materials for many Japanese industry sectors, the Japanese government conceded and released the captain. A flood of conflicting reports on China's handling of the event ensued. On the one hand, outside of China, criticisms focused on China's political manipulation of trade and resource protectionism were rampant; on the other hand, the Chinese media denied any claims of embargo, shied away from discussing the collision, and focused on delineating China's rare earth policy challenges. Nevertheless, many facts surrounding China's rare earth policy have been overlooked, misrepresented, misinterpreted, or misreported. By analyzing government policy documents, as well as news articles collected from Factiva and Lexis-Nexis databases and Chinese websites, this thesis looks at the discrepancies between major Western and Chinese media reporting and representations of the 2010 Rare Earth Controversy specifically, and of China's rare earth policy in general. In the process, the thesis also presents the institutional, social, and political and economic complexities surrounding China's rare earth policy making.

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Dedication

This thesis is dedicated to the people – children, men, women, and elders – living in China’s devastatingly contaminated rare earth mining towns, whose lives and livelihoods have been damaged by poorly regulated mining of rare earth metals, as well as burdened by the world’s over-reliance on Chinese rare earths. It is also dedicated to journalists, policymakers and analysts, and researchers – whether Chinese, non-Chinese Asian or Western – who have tried to shed light on the debate over rare earths.

Chapter One: Introduction

1.1 Empirical Background

On the morning of September 7th, 2010, a Chinese fishing trawler, Minjinyu 5179, was intercepted by Japan Coast Guard (JCG) near the Pinnacle Islands¹ in the East China Sea, which is a territorial sea claimed by both China and Japan. During the chase, the trawler collided with two JCG patrol vessels, Yonakuni and Mizuki.² Hours later, an emergency deliberation ensued between the Japan Coast Guard, Ministry of Foreign Affairs, the Chief Cabinet Secretary Sengoku Yoshito, and other relevant offices, which gave JCG the order to board the trawler and arrest its captain (Zhan Qixiong) and crew members.

At the same time, the Chinese government initiated high-level diplomatic communication and dispatched fishery patrol boats to the disputed territorial waters. On the night of the incident, Deputy Foreign Affairs Minister Song Tao met with the Japanese Ambassador to China, Niwa Uichirou, and demanded the release and safety of the Chinese fishermen and fishing boat. However, two days later, on September 9th, despite China's demands, the Ishigaki Maritime Safety Agency charged captain Zhan for obstruction of justice and violations of the Fisheries Act, and transferred him to the Naha District Prosecutor's Office to stand trial according to Japanese law. A day later, the Ishigaki Summary Court approved the prosecutor's request to detain the fishermen for ten days.

¹ The Pinnacle Islands are a group of uninhabited islands in the East China Sea. These islands are known in Japanese as the Senkaku Islands and in Chinese as the Diaoyutai Islands. The islands are currently controlled by Japan; however, Japan's ownership of the islands has been disputed by China (PRC) and Taiwan (ROC). The collision that serves as the narrative backdrop of this thesis occurred near one of the islands, which is located at 25° 56' 0" N, 123° 41' 0" E, and referred to as "Huangwei Yu" in Chinese and "Kuba-jima" in Japanese. For the purpose of this thesis, "the Pinnacle Islands" would be used to refer to these islands in order to demonstrate and maintain political neutrality and analytical objectivity.

² "Boat Collisions Spark Japan-China Diplomatic Row," *BBC News Online*, last modified September 8, 2010, accessed August 29, 2012, <http://www.bbc.co.uk/news/world-asia-pacific-11225522>.

Between September 10th and 19th, the Chinese government continued to press for the release of the fishermen. Several high-level Chinese officials were involved in the diplomatic negotiation, including Assistant to Foreign Minister Hu Zhengyao, Foreign Minister Yang Jiechi, Deputy Foreign Minister Wang Guangya, and Assistant to Foreign Minister Liu Zhenmin. Also, on September 13th, State Councillor Dai Bingguo summoned Japanese Ambassador Niwa to discuss the matter and cautioned Japan to “make wise political decisions.”³ In light of the collision incident, Li Jianguo, Vice Chairperson of the Standing Committee of the National People’s Congress, postponed his scheduled official visit to Japan. In response to Li’s schedule change, Japan released Minjinyu 5179 and its crew, but continued to detain captain Zhan. On September 19th, the Ishigaki Summary Court extended the Zhan’s detention term by ten days; around the same time, Japanese Foreign Minister Maehara Senji and Chief Cabinet Secretary Sengoku Yoshito publicly affirmed that the Chinese captain would be seriously dealt with according to Japanese law.⁴ The extended detention was met with stern protests from China. However, China’s persistent request for Zhan’s release was met with equally stern rejection by the Japanese authority.

The diplomatic tension culminated between September 20st and 23rd. By September 20th, China had ceased ministerial- and provincial-level of exchanges with Japan, suspended negotiations concerning the Sino-Japan joint oil exploration project and air traffic services cooperation coordination, postponed the Sino-Japan Coal Comprehensive Conference, and

³ “中日緊繃！日扣船長 中官員延訪,” *Strait Information Net 海峽資訊網*, last modified September 15, 2010, accessed August 29, 2012, <http://www.haixiainfo.com.tw/t3-118460.html>.

⁴ Maehara Senji’s words: “逮捕した漁船の船長の處遇も日本の國內法に基づき肅々と対応する。” See: “衝突事件は‘偶発的’ 前原外相、中国に冷静な対応呼びかけ,” *The Sekai Nippo 世界日報*, last modified September 20, 2010, accessed August 29, 2012, <http://www.worldtimes.co.jp/today/kokunai/100920-2.html>; Suzuki Muneo, diary entry on personal website, September 30, 2010, *New Party Daichi leader Suzuki Muneo’s personal website*, accessed August 29, 2012, http://www.muneo.gr.jp/diary/diary_2010_09.html; and “中國外長嚴正交涉日本大使強硬回應（組圖）,” *Wangchao.net.cn 王朝網路*, accessed August 29, 2012, http://tc.wangchao.net.cn/junshi/detail_157564.html.

reduced Chinese tourism to Japan.⁵ Speaking in New York on September 21st, Chinese Premier Wen Jiabao “strongly urged” the Japanese authority to release captain Zhan and admonished that further counter measures would be taken if Japan continued to hold the captain in captivity.⁶ Two days later, updates from major Japanese and English newspapers reported stopped shipments of rare earth metals (REEs)⁷ from China to Japan. On September 25th, captain Zhan was released.

The collision and the consequent extended detention of captain Zhan led to a major diplomatic feud between China and Japan, which ended in China’s “alleged REEs embargo”⁸ against Japan of rare earth metals, vital ingredients for many high-tech products that Japan produces and exports. Soon after the release of captain Zhan, outside of China, a flood of conflicting reports on China’s manipulation of its REEs export trade for political gains started to circulate, with some claiming without hard evidence an extended Chinese REEs embargo against the U.S. and the E.U.⁹ Moreover, as market speculations and public discussions about the REEs’ technological applications spread, suddenly the world became alarmed by China’s supply monopoly over a group of metals critical to almost every aspect of the modern life.

⁵ “日本法院批准再延押中国船长 10 天 中方抗议,” *Phoenix Infonews 凤凰网资讯*, last modified September 20, 2010, accessed August 29, 2012, http://news.ifeng.com/mainland/special/zrczdydxz/content-2/detail_2010_09/20/2559736_0.shtml.

⁶ “温家宝总理在纽约强烈敦促日方立即无条件放人,” *PRC Central Government 中央中央人民政府*, last modified September 22, 2010, accessed August 29, 2012, http://www.gov.cn/ldhd/2010-09/22/content_1707863.htm.

⁷ REEs = rare earth elements, also known as rare earth metals. In this thesis, the acronym “REEs” refers to both.

⁸ For lack of a better, more precise term, in this thesis, the word “embargo” is used loosely and interchangeably with “stopped shipment” and “ban.” Therefore it should not be understood in its conventional sense, because there was neither official announcement of nor admission to the reported stopped shipments of REEs. Further, it was not clear whether the shipments were actually halted for diplomatic reasons or they were slowed down due to tightened custom inspections in response to several incidents of REEs smuggling to Japan which occurred prior to the 2010 Pinnacle Islands collision.

⁹ “China Said to Expand Rare Earths Embargo to West,” *New York Times*, last modified October 19, 2010, accessed August 29, 2012, <http://www.nytimes.com/2010/10/20/business/global/20rare.html>; and “No China Rare Earth Embargo to US and EU: MolyCorp CEO,” *Reuters*, last modified October 29, 2010, accessed August 29, 2012, <http://www.reuters.com/article/idUSTRE69P3SN20101026>.

1.2 Themes

This thesis is a case study about media representations of diplomatic crises. Similar to Sheaffer and Gabay's study on the Israeli-Palestinian competition over international agenda building and frame building,¹⁰ this study also employs a multi-actor analytical approach that includes state antagonists, foreign governments and the media, disclosing discrepancies between differently constructed realities in the international political arena.

The misaligned perceptions between China and the West¹¹ about the “alleged embargo”¹² are evident in the discrepancies between Chinese and Western media coverage of the relevant issues and facts. Mainstream English (for example, Canada, the U.S. and the U.K.) and Japanese news reporting of the controversial REEs “embargo” emphasized the relationship between the halting of the export and the fishing boat collision, which contributed to projecting China as a country that hoards resources for political gains. On the other hand, the Chinese media reports focused on the environmental damage caused by REEs mining and the need for industry restructuring. The fear and suspicions portrayed in these English media coverage of the controversy deepened and intensified the sense of “China threat,”¹³ that China needed to be reasoned out of her political tantrum. This was mirrored and responded by a heightened sense of nationalism, patriotism and anti-West sentiment within China.¹⁴ In response to foreign criticisms, domestically, the Chinese state media embarked on a nationalistic campaign which aimed to

¹⁰ Tamir Sheaffer and Itay Gaby, “Mediated Public Diplomacy: A Strategic Contest over International Agenda Building and Frame Building,” *Political Communication* 26: 447-467.

¹¹ Unless otherwise specified, in this thesis, the term “West” refers to countries in the Group of Eight (G8).

¹² See *supra* note 7.

¹³ For example, see: Blake Hounshell, “Is China Making a rare Earth Power Play,” *Foreign Policy*, last modified September 23, 2010, accessed August 29, 2012, http://blog.foreignpolicy.com/posts/2010/09/23/is_china_making_a_rare_earth_power_play.

¹⁴ For example, see: “凤凰网财经: 稀有金属保卫战,” *Phoenix Infonews 凤凰网资讯*, accessed August 29, 2012, <http://finance.ifeng.com/topic/news/xiyoujinshu/>.

dispel foreign perceptions about the controversy and to defend China's REEs policy; and internationally, the state media downplayed the connections between the fishing boat collision and the alleged embargo, arguing that export restrictions were imposed for environment protection and national security.

Having an understanding of the way news media outlets characterize a particular policy issue may enable the analyst to gain insights into the views of policy makers and influencers on a particular policy issue. In the context of international conflict and diplomatic strife, seeing a conflict through the perception of the other state player(s) involved may be conducive to conflict resolution and cooperation, and to predict the short- and long-term policy behaviour of the stakeholders involved. In this sense, the 2010 Pinnacle Islands Collision and REEs Controversy (hereafter the *2010 REEs Controversy*) makes a good case study because of its international, regional and domestic consequences: internationally, the diplomatic strife between China and Japan ended in an “alleged REEs embargo”¹⁵ with worldwide repercussions, including enhanced strategic alliance between Japan and other countries with REEs reserves, such as India, Vietnam and Mongolia; regionally, the dispute was a manifestation of historical animosity; while domestically, in China, it not only intensified nationalist sentiment against Japan and the West, and instigated public education about China’s resource security, but also strengthened public support for a series of industrial restructuring carried out by the central government.

¹⁵ See *supra* note 7.

1.3 Research Question

In public diplomacy, sympathetic foreign media coverage is a prerequisite for political influence.¹⁶ But how can and does a state gain foreign media's sympathy? If an antagonist state actor involved in a diplomatic dispute has often been portrayed by the foreign media more negatively than positively, is it possible for the foreign media to align their representation of the dispute with those of the antagonist state actor? To answer these questions, I compare the discrepancies between Chinese, Japanese and English media representations of the 2010 REEs Controversy.

For the remaining of this thesis, chapter two provides an overview of current literature and outlines the thesis' methodology. In chapter three I present the history and detailed background of China's REEs policy, followed by a discussion in chapter four. The concluding chapter discusses the finding of the research and its policy significance.

¹⁶ Tamir Sheafer and Itay Gaby, "Mediated Public Diplomacy," 447.

Chapter Two: Literature Review and Methodology

2.1 Literature Review

One area of research relevant to this thesis is foreign policy decision making, especially those theories pertaining to crisis decision making and crisis behaviour. In *Contending Theories of International Relations* (2001), Dougherty and Pfaltzgraff provide a comprehensive overview of decision-making theories and postulate that “perception is assigned a central place in decision making theory [...] Most decision-making theorists regard the world as viewed by decision makers to be at least as important as objective reality.”¹⁷ In *China Cross the Yalu* (1960), Allen Whiting assesses the motivations and forces that shaped China’s decision to intervene the Korean War. A more recent publication on foreign policy decision making is Mintz and DeRouen’s *Understanding Foreign Policy Decision Making* (2010), which focuses on decision-making process and discusses the psychological, group, domestic and environmental factors that influence foreign policy decisions. However, while decision-making theories offer insights into how foreign decisions are made and what impacts the decision-making outcomes, they mainly focus on cost-and-benefit analysis, decision makers and the limits of human cognitive capacities. Furthermore, the majority of case studies that were used to develop the theories pertain to international conflicts in the form of military conflicts. This presents analytical constraints when dealing with diplomatic conflicts such as the 2010 REEs Controversy where the competition for political influence is not measured by military might but soft power such as economic chokepoints and foreign media representations.

¹⁷ James Dougherty and Robert Pfaltzgraff, *Contending Theories of International Relations* (New York: Longman, 2001), 554.

Another body of literature relevant to this thesis is political communications, whose theory and research are more attuned to “questions and conflicts of power.”¹⁸ While some of the literature incorporates various aspects of communication and public relations studies – including political marketing, political advertising, branding, agenda building and framing¹⁹ – these interdisciplinary analyses, like Sheafer and Gabay’s study on international agenda building and frame building (2009), focus on the outcomes of the media activities conducted by political actors. Consequently, the internal information process of mediated political communication, such as why a political issue is framed and interpreted in a certain way, as well as the environmental influences affecting such process, has not been adequately studied.

In light of the contribution that having an understanding of such internal information process can make to facilitate international political conflict resolution, concepts of sensemaking and framing (especially “frame building”) are helpful in filling the gap between the why and what. Brenda Dervin, one of the pioneers in the field of sensemaking, postulates that “information” is not a thing but a construction which is a product of constrained human observing. As human observing is constrained by “the limits of human perceptual equipment, by the control exerted on perception by unique human minds, and by the boundaries placed on perception by time and space, so is information.”²⁰ Indeed, framing, which refers to the

¹⁸ Jesper Stromback and Spira Kioussis, “Defining and Mapping the Field,” in *Political Public Relations: Principles and Applications*, eds. Jesper Stromback and Spira Kioussis (New York: Routledge, 2011), 6.

¹⁹ For example, see: Brian McNair, *An Introduction to Political Communication* (London: Routledge, 2003); Jesper Stromback and Spira Kioussis, eds., *Political Public Relations: Principles and Applications* (New York: Routledge, 2011); Karen Sanders, *Communicating Politics in the Twenty-First Century* (New York: Palgrave, 2009); Darren G Lilleker and Jennifer Lees-Marshment, eds., *Political Marketing: A Comparative Perspective* (Manchester: Manchester University Press, 2005); David A. Schultz, *Lights, Camera, Campaign: Media, Politics and Political Advertising* (New York: Peter Lang, 2004).

²⁰ Brenda Dervin, “Mass Communicating: Changing Conceptions of the Audience,” in *Sensemaking Methodology Reader: Selected Writings of Brenda Dervin*, eds. Brenda Dervin and L. Foreman-Wernet (with E. Lauterbach) (Cresskill, NJ: Hampton Press, 2003), 200.

construction of reality in a predictable and patterned way,²¹ is a manifestation of constrained human observing. “To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation.”²² Frames influence both political decision-making and public opinion: they are central organizing ideas that give meanings to an unfolding series of event, suggesting what the controversy is about and what the essence of the issue is.²³

Nevertheless, in political communication, journalists, as news content creators, are just as susceptible to framing as their audiences.²⁴ The construction or selection of frames is not necessarily an intentional, conscious process, because people’s information processing and interpretation – in other words, sensemaking – are influenced by prior experience, as well as pre-existing meaning structure or schema. Previous framing studies examining the extrinsic and intrinsic factors influencing the production and selection of news, such as the works of Tuchman (1978), and Shoemaker and Reese (1996), suggest that there are at least five factors that may potentially influence how journalists frame a given issue: social norms and values, organizational pressures and constraints, pressures of interest groups, journalistic routines, and ideological or political orientations of journalists.²⁵ Furthermore, Gans’ (1979), and Shoemaker and Reese’s (1996) works suggest that there are at least three potential sources of influence on frame building: 1) journalist-centred influences, which occur when journalists actively construct

²¹ Dietram Scheufele, “Framing as a Theory of Media Effects,” *Journal of Communication* 49, no. 1 (1999): 105.

²² R.M. Entman, “Framing: Towards Clarification of a Fractured Paradigm,” *Journal of Communication* 43, no. 4 (1993): 52.

²³ W.A. Gamson and A. Modigliani, “The changing culture of affirmative action,” in *Research in Political Sociology Vol. 3*, eds. R.G. Braungart and M. M. Braungart (Greenwich: JAI Press, 1987), 143.

²⁴ Scheufele, “Framing as a Theory of Media Effects,” 115.

²⁵ Scheufele, “Framing as a Theory of Media Effects,” 109.

frames to structure incoming information, refers to the formation of frame that is moderated by variables such as ideology, attitudes and professional norms; 2) the selection of frame as a result of factors like the political orientation of the medium or organizational routines; and 3) external sources of influence such as political actors, authorities, interest groups and other elites.²⁶

2.2 Methodology

This thesis compares the discrepancies between different media representations – by foreign as well as the antagonist states’ domestic news outlets – of the 2010 REEs controversy.

2.2.1 Data Collection

Using the Factiva and Lexis-Nexis databases, I collected and analyzed English-language news reports related to China’s REEs policy during the period between June 1st and December 31st, 2010, that were published by the following news agencies: the *Wall Street Journal* (N = 36), the *New York Times* (N = 34), *Reuters* (N = 78), the *Globe and Mail* (N = 10), *Nikkei Keizai Shimbun* (N = 30), *Kyodo News* (N = 55), *China Daily* (N = 52), and *Xinhua News* (N = 53). From the *China Rare Earth Network* (cre.net), I collected Chinese-language news articles released during the same period (N = 85).

The newspapers were chosen based on their information dissemination impact and country representation: the *Wall Street Journal*, the *New York Times*, the *Globe and Mail*, and *Reuters* are major news agencies headquartered, respectively, in the United States, Canada, and the United Kingdom. *Nikkei Keizai Shimbun* and *Kyodo News* are both large Japanese news agencies, with *Kyodo News* being a major news distributor in Japan. *Xinhua News* is China’s

²⁶ Scheufele, “Framing as a Theory of Media Effects,” 115.

official press agency, and *China Daily* is the largest English-language newspaper in the country. Lastly, the *China Rare Earth Network* is an online news and information aggregator for Chinese REEs-related news.

2.2.2 Identification of Keywords and Key Ideas

Among the news articles collected, a list of common and recurrent key terms and ideas were identified, including: embargo/ban, export restriction, [production] monopoly, environmental concern, diversification of REEs sources, price, industry restructuring, territorial dispute, smuggling, and delayed custom inspection. Their frequencies of occurrence before and after the fishing boat collision were recorded and later used to determine the particular frames the Chinese, Japanese and English newspapers employed to present the REEs controversy.

2.2.3 Limits of Research

No interviews were conducted for this thesis. The thesis is entirely based upon secondary and tertiary accounts of the research and events related to the controversy. Also, major European and Australian newspapers, as well as the Chinese-language version of *Xinhua News*, were excluded from the study to keep the study within a manageable scope.

Chapter Three: China's Rare Earth Policy

3.1 Fact: What Are Rare Earth Elements

Rare earth elements (REEs), also known as “technology metals,” refer to those elements that are part of the family of lanthanides on the periodic table with atomic numbers 57-71, as well as scandium (atomic number 21) and yttrium (atomic number 39). The name “rare earth” is a misnomer, for they can be found in almost all massive rock formations. According to the U.S. Geological Survey, “the more abundant REEs are each similar in crustal concentration to commonplace industrial metals such as nickel, copper, zinc, tin, or lead. Even the two least REEs (Tm, Lu) are nearly 200 times more common than gold.”²⁷ However, despite their abundance, REEs are found in low concentrations in the earth's crust, and in higher concentrations in numerous minerals, with concentrations ranged from ten to a few hundred parts per million by weight. Because of their dispersed geological concentrations, REEs are economically difficult to mine and environmentally risky and costly to process.²⁸ The most abundant rare earth elements are found primarily in bastnaesite and monazite deposits: China and the U.S. make up the largest percentage of economic bastnaesite rare earth deposits, while monazite deposits in Australia, Brazil, China, India, Malaysia, South Africa, Sri Lanka, Thailand, and the U.S. comprise the second largest segment.²⁹

Although low on the production chain, the REEs are considered strategic resources and are used in the “widest range of consumer products of any group of elements.”³⁰ They are

²⁷ “Fact Sheet 078-02: Rare Earth Elements – Critical Source for High technology,” *U.S. Geological Survey*, last modified May 17, 2005, accessed August 29, 2012, <http://pubs.usgs.gov/fs/2002/fs087-02/>.

²⁸ “Rare Earth Elements Profile,” *British Geological Survey* (2010, 2011): 5, last modified November 5, 2011, accessed August 29, 2012, <http://www.bgs.ac.uk/downloads/start.cfm?id=1638>.

²⁹ Cindy Hurst, “China's Rare Earth Elements Industry: What Can the West Learn?,” *Institute for the Analysis of Global Security* (2010): 4, accessed August 29, 2012, <http://fmso.leavenworth.army.mil/documents/rareearth.pdf>.

³⁰ “Rare Earth Elements Profile,” 16.

critical to hundreds of high-technology applications, including but are not limited to: oil refining, electronics (cell phones, laptop computers and televisions), automobile parts, defense industry (cruise missiles, precision guided munitions, radar system and reactive armour), and green technology (wind turbines, hybrid cars, and low-energy light bulbs).

3.2 The View from China

3.2.1. The History of Chinese Rare Earth

“The Middle East has oil, but China has rare earth metals.” A famous statement by Deng Xiaoping during his 1992 southern tour, the quotation has been cited in numerous news reports and research publications both in the West and within China, especially since the 2010 REEs Controversy. The very same quote has created two opposite reactions among the two camps. In the West, Deng’s statement has been interpreted, without context, as concrete evidence supporting the “China threat” perception, demonstrating China as “dangerously trigger-happy” and “willing to wage economic warfare with the slightest provocation.”³¹ On the other hand, in China, Deng’s 1992 statement is often cited in its entirety either with or without context, serving as a policy reminder and a strategic vision for nation-building and development.³²

The Middle East has its oil, and China has rare earth metals. [China's rare earth deposits account for 80 percent of the identified global reserves, we can compare the status of our

³¹ Paul Krugman, “Rare and Foolish,” *New York Times*, last modified October 17, 2010, accessed August 29, 2012, <http://www.nytimes.com/2010/10/18/opinion/18krugman.html>.

³² See: “谋求国际话语权: 中东有石油 中国有稀土,” *Xinhuanet 新华网*, last modified September 13, 2010, accessed August 29, 2012, http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/2010-09/13/c_12548546.htm; and Dou Xuehong 窦学宏, “小平同志高度重视稀土产业,” *China Rare Earth Network 中国网*, accessed August 29, 2012, <http://www.cre.net/show.php?contentid=102662>.

rare earth reserves to that of oil in the Middle East.] *It is of extremely important strategic significance; we must be sure to handle the rare earth issue properly and make the fullest use of our country's advantage in rare earth resources.*³³ (Emphasis added; the bracketed part is sometimes omitted)

Indeed, Deng's statement needs to be contextualized in order to be understood without misinterpretation. His 1992 comment regarding China's rare earth deposits was actually an extended emphasis of the remark he made about the Baiyun Obo Iron Mine during his 1964 tour at the Baotou Iron and Steel Company Ltd., Inner Mongolia:

“The Baiyun Obo is a treasure mountain; we should develop and utilize it well. [...] We should develop our steel and iron, and rare earths as well, comprehensively utilizing the precious resources provided by this mountain.”³⁴

Considering the historical context under which Deng made the remark (1964) – the breakup of technological partnership with the former Soviet Union, Sino-Soviet ideological and military strife, and a total trade embargo led by the U.S. – it then becomes clear that, rather than “conspiring world dominance” (as interpreted by the West), Deng placed an emphasis on “development” and “advancement,” with the connotation of “self-reliance and sufficiency” which was the policy doctrine during the 1960s. His 1992 remark – made at the time China was losing its self-sufficiency in strategic resources such as oil, and anxiously becoming a net importer of oil products and crude oil – can therefore be viewed as a cautionary reminder as

³³ Supra note 32. The original statement in Chinese: “中东有石油, 中国有稀土, 中国的稀土资源占世界已知储量的80%, 其地位可以和中东的石油相比, 具有极其重要的战略意义, 一定要把稀土的事情办好, 把我国的稀土优势发挥出来。”

³⁴ Supra note 32. Original statement in Chinese: “白云鄂博是座宝山, 我们要很好地开发利用 [...] 我们要搞钢铁, 也要搞稀土, 要综合利用宝贵的矿山资源。”

well as a policy reflection, which has been the guiding objective of China's rare earth policy in particular, and resource management policy (especially in the area of oil and gas) in general.

Considering at the time of Deng's 1992 remark, China was becoming a net oil importer and was forced to adopt the "going out" (走出去) strategy and to give up its former policy of self-sufficiency (自立更生) indoctrinated under Mao. In this light, it can be argued that, for many in China, the policy history of oil has become a "lesson-learned" for resource management. From 1972 onwards, with the transformation of Sino-American strategic relationship, countries in the Western bloc started to lift the embargo off China. Coupled with the first oil crisis (1973-74), this allowed China to become an exporter of oil, coal and other mineral commodities in 1973, in order to earn the hard currency needed for economic development. Among its mineral commodity trade partners in the 1970s, Japan played the most critical role in China's utilization of trade as a means to achieve a diplomatic breakthrough. China's oil export volume peaked in 1985 and started to decline in 1986, with production beginning to slowdown since 1974. In response to decreased domestic production and rising domestic demand stimulated by the economic boom, China turned again to foreign sources for crude oil, first from Oman in 1983. With oil accounting for 19% of total primary energy demand in 1995,³⁵ China became a net importer of oil product and crude oil in 1993 and 1996, respectively.

The rationale for comparing China's oil and gas policy, and rare earth policy, is the striking similarities between of their paths of evolution. Both petroleum and rare earth metals are fundamentally critical to the country's industrialization and economic development, and that the policies pertaining to both strategic resources have been designed as countermeasures to offset the unfavourable geopolitical situations China finds itself facing. Moreover, both the oil-

³⁵ "China's Worldwide Quest for Energy Security," *International Energy Agency* (2000): 20, accessed August 20, 2012, <http://www.oecdchina.org/OECDpdf/china2000.pdf>.

gas and rare earth policies are part of China's grand resource strategy, which is considered an aspect of "comprehensive national power."³⁶

The evolutionary paths of the oil-gas policy and the rare earth policy share a common pattern: import-dependency → self-sufficiency → export for hard currency → depletion of resources → strategic "cultivating the inside and the outside"³⁷ approach. This is due to the fact that the oil-gas and rare earth situations in China share the following characteristics and historical experiences:

- 1) Oil, gas and rare earth metals all used to be imported between 1863 – 1950s, when China experienced long-term hardships, political turmoil and underdevelopment (1863 – 1950s), and the industries were faced with stunted development due to foreign influence.
- 2) Sufficient domestic supplies of oil, gas and rare earth metals were once symbolic of "self-sufficiency and reliance", a doctrine of China's resource policy, due to China's historical and political experiences.
- 3) Both the production and conservation of oil-gas and rare earth metals were and have been impeded in part by underdeveloped mining technology and ineffective methods, causing unnecessary depletion of mineral resources.
- 4) After the transformation of Sino-American strategic relationship in the early 1970s, oil and rare earth metals were once sold on the international market to obtain the hard currency needed for economic development.³⁸

³⁶ "综合国力的概念分析," *China.org.cn 中国网*, last modified March 19, 2003, accessed August 29, 2012, <http://www.china.com.cn/chinese/zhuanti/295793.htm>; and Li Hao and Guan Hongping 李皓, 管宏平, "中国建立稀土战略储备制度的国际战略意义," *河北青年管理干部学院学报* 5 (2009): 91.

³⁷ The original Chinese of this phrase is "*nei wai jian xiu* 内外兼修." Although at the present stage, the Chinese strategy towards rare earth is more about "*an nei rang wai* 安内攘外" than "*nei wai jian xiu*." See: "评论: 中国稀土行业攘外必先安内," *China News 中国新闻网*, last modified November 8, 2010, accessed August 29, 2012, <http://www.chinanews.com.cn/ny/2010/11-08/2639937.shtml>.

³⁸ Of course, in the case of REEs, this is no longer the case; and China no longer exports oil.

- 5) Like oil and gas, rare earth metals are strategic resources critical to China's industrialization and national development, particularly now as China is undergoing another industrial revolution in the era of climate change.³⁹
- 6) Similar to its oil and gas experience, China's domestic demand for rare earth metals has increased, yet the depletion rate of the resource is alarming. Where twenty years ago China's rare earth reserve accounts for eighty percent of the world's total reserve, at present it only accounts for 36 to 52 percent.⁴⁰
- 7) Like oil and gas, should China become a net importer of rare earth metals, its national security will be threatened and its technological development and transition will be at the mercy of REEs-exporting countries, most of which are U.S. allies.⁴¹ Because of China's own experience as a net oil-importing country, this scenario is something that the Chinese policy makers will not want happen. Also, it would be naïve not to take into account the impact of China's historical memory – of the late nineteenth century and the first three quarters of the twentieth century – on policy doctrines and designs.⁴²

³⁹ In other words, the "Green Industrial Revolution".

⁴⁰ The range varies from report to report. But the most commonly seen estimate is in the 30s range. See: Kandaswami Subramanian, "The Trouble with China's Rare Earths," *South Asia Analysis Group Paper* 4119 (2010), last modified October 24, 2010, accessed August 29, 2012, <http://www.southasiaanalysis.org/%5Cpapers42%5Cpaper4119.html>.

⁴¹ China has been very conscious and meticulous about its geopolitical disadvantages when it comes to resource security. This perception of threat is reflected in the multi-dimensionality of China's resource policy, through a combination of strategies including: "going-out," "diversification," "conservation," and development of green technology (the latter two can be seen as a modified version of the earlier "self-sufficiency" doctrine).

⁴² It is often amusing to find how much of the West's analysing of China, at least in news reports, tends to be ignorant of the power of historical memory and historical narratives which perpetuate in daily lives. For an example of the narrative power of historical memory, see: "What Do You Really Want from Us? 给西方的诗: 你究竟要我们怎样生存?" and related online commentaries, blog entry on *zhjtop* 谁是谁非任评说, last modified November 23, 2010, accessed August 29, 2012, http://blog.sina.com.cn/s/blog_49c1101d0100nysv.html. The poem is widely circulated (within the Chinese community), and is supposedly written by Lin Duoliang, professor emeritus of physics at the University of Buffalo State.

In light of the aforementioned similarities in policy evolution and historical experiences, it can be stipulated that the oil-gas experience has been a “lesson learnt” for China with regards to designing policies towards the optimized utilization and conservation of strategic resources. Looking at the policy development trend since the early 1990s, the objectives of China’s rare earth policy have been to protect, conserve and rationally utilize the resources, in order to maintain self-sufficiency and self-reliance in REEs, as well as to minimize the chokepoints of its national development and security.⁴³

Table 3.2: Comparative Timelines between China’s Oil and Gas Policy, and Rare Earth Policy

Year	Oil and Gas	Rare Earth
1863 to 1948	- Imported; then called “yang you”(洋油). - Monopoly of foreign oil companies in China caused stunted development and modernization of Chinese petroleum industry.	- Rare earth research and industry either underdeveloped or non-existent. - Relied on rare earth imports, such as cerium. - Industrialization stunted partly as a result.
1949	Energy development became one of the country’s most important tasks.	(same)
1958	n/a	Zhu Zhenfan at the Hunan Nonferrous Metal Research Institute discovered a way to produce rare earth metals for industrial use. ⁴⁴
1962	n/a	China began to produce ferrocerium, ending the era of foreign REEs imports. ⁴⁵

⁴³ Which include, but are not limited to, resources (including energy), technology, and human resources...etc.

⁴⁴ “简陋方法提炼稀土 中国结束打火机靠进口的历史,” *Phoenix Infonews 凤凰网*, last modified May 6, 2010, accessed August 29, 2012, http://big5.ifeng.com/gate/big5/news.ifeng.com/mil/history/detail_2010_05/06/1490969_0.shtml.

⁴⁵ Supra note 44.

Year	Oil and Gas	Rare Earth
1963	Successful exploitation of Daqing oil field; beginning of oil self-sufficiency, ending a century of reliance on foreign oil.	n/a
1964	n/a	Deng's "The Middle East has oil, but China has rare earth elements."
1972	US trade embargo ended, China began to export oil for hard currency.	REEs export commenced in the 70s.
1978 to 1989	1980s: Increasing demand due to national economic growth.	- China pushed for REEs production and innovation. - Increasing demand due to national economic growth. - It became the world's largest REEs producer. - Glut in global supplies and the prices crashed.⁴⁶
1991	n/a	REEs categorized as "endangered metals." ⁴⁷
1993 and 1996	China became a net importer of oil products and crude oil.	Various policies and regulations geared towards REEs development and conservation.
1997	"Going-out" strategy under Li Peng. - Realist approach.	

⁴⁶ The period from which the REEs price started to crash is disputed. According to some reports, the price crashed by the 80s, while others stated it did in the 90s. See: Mark Humphries, "Rare Earth Elements: The Global Supply Chain," *Congressional Research Service* (2010, 2012), last modified June 8, 2012, accessed August 29, 2012, www.fas.org/sgp/crs/natsec/R41347.pdf; and Kandaswami Subramanian, "The Trouble with China's Rare Earths."

⁴⁷ "国务院关于将钨, 锡, 锑, 离子型稀土矿产列为国家实行保护性开采特定矿种的通知," *Ministry of Industry and Information Technology 工业和信息化部*, last modified January 5, 1991, accessed August 29, 2012, <http://www.miit.gov.cn/n11293472/n11505629/n11506410/n11514954/n11923841/n11923931/12032066.html>.

Year	Oil and Gas	Rare Earth
1997 to 2004	• “Going-out.” • Diversification; • “Conservation-minded society.” • Development of green technology.	• 2001: protective mining of REEs.⁴⁸ • 2003: China’s Mineral Resource Policy.⁴⁹ • 2004: further restructuring of mineral resources and industry management.⁵⁰ • 2004: REEs structuring project.⁵¹
2005 to now	• Major diplomatic strife: Competition with Japan over the Russian Trans-Siberian pipeline project, 2005-2010.	• 2006: export duties on REEs increased.⁵² • 2008: restructuring of relevant departmental agencies.⁵³ • 2009: Policy on rare earth industrial development.⁵⁴ • Major diplomatic strife: rare earth smuggling accusations, Senkaku dispute resulted in embargo (2010).

⁴⁸ “对钨, 稀土矿进行保护性开采,” *China.org.cn 中国网*, last modified July 23, 2001, accessed August 29, 2012, <http://www.china.com.cn/chinese/TEC-c/46245.htm>.

⁴⁹ “中国的矿产资源政策,” *PRC Central Government 中国中央人民政府*, last modified May 27, 2005, accessed August 29, 2012, http://big5.gov.cn/gate/big5/www.gov.cn/zwgk/2005-05/27/content_1475.htm.

⁵⁰ “关于进一步治理整顿矿产资源管理秩序的意见,” *Ministry of Land and Resources 国土资源部*, last modified June 25, 2004, accessed August 29, 2012, http://www.mlr.gov.cn/xwdt/jrxw/200406/t20040625_570726.htm.

⁵¹ “国土资源部办公厅发文要求专项整治稀土锡锑矿,” *Ministry of Land and Resources 国土资源部*, last modified June 25, 2004, accessed August 29, 2012, http://www.mlr.gov.cn/xwdt/jrxw/200406/t20040625_589737.htm.

⁵² 财政部副部长朱光耀: “加强出口关税手段, 控制“两高一资”产品出口。为保护国内资源和环境, 近年来我国逐步加大对高耗能、高污染和资源型(“两高一资”)产品出口的调控力度, 自2006年11月开始, 较大范围地对金属矿砂、稀土、钢锭等产品征收出口关税, 此后又多次调整了“两高一资”产品出口关税的征收范围和税率。” See: “朱光耀副部长在纪念海关恢复征税30周年高层论坛上的致辞,” *Ministry of Finance 财政部*, last modified December 1, 2010, accessed August 29, 2012, http://gss.mof.gov.cn/zhengwuxinxi/lingdaojianghua/201012/t20101202_360104.html.

⁵³ “内地拟提高稀土行业准入门槛 坚持禁止外商进入矿山,” *Phoenix Infonews 凤凰网*, last modified August 13, 2009, accessed August 29, 2012, <http://finance.ifeng.com/news/industry/20090813/1079373.shtml>.

⁵⁴ “工信部透露稀土产业政策将出炉 三公司有望受益,” *Phoenix Infonews 凤凰网*, last modified August 22, 2009, accessed August 29, 2012, <http://finance.ifeng.com/stock/zqyw/20090822/1129011.shtml>.

3.2.2 The Ideology: National Security and the Four Pillars of Resource Security

China's resource policies throughout the 1990s perceived resource security as a struggle to control the sources of a strategic resource (such as oil) in order to achieve self-sufficiency. Since 2003, China has opted for a more comprehensive, non-traditional conception of resource security which incorporates a market approach, a strategic vision, and a conception of scientific development (*kexue fazhanguang* 科学发展).⁵⁵ Under the leadership of Hu Jintao and Wen Jiabao, the Chinese government not only has maintained the ideational legacy and the proactive-offensive approach of their predecessors – the Maoist philosophy of self-sufficiency (*zili gengsheng* 自力更生) and Li Peng's "going-out" strategy (*zouchuqu* 走出去) – but also has initiated the idea of "conservation-minded society" (*jieyue shehui* 节约社会). There are three directions that characterize China's domestic energy strategy and they work in conjunction: 1) energy conservation; 2) renewable energy resource development; and 3) strategic economic development.

Presently, among the four pillars of China's resource security, "self-sufficiency," "scientific development,"⁵⁶ and "conservation-minded society" have been the dominant policy drivers for rare earth policy. This is evident in the *Several Opinions on Encouraging the Healthy Development of Rare Earth Industry* and *White Paper on China's Rare Earth Industry*, released by the State Council in May 2011 and June 2012, respectively.⁵⁷ Born out of the historical

⁵⁵ Christian Constantin, "Understanding China's Energy Security," *World Political Science Review* 3, no. 3: 8-16.

⁵⁶ Geng Yufei 耿宇飞, "稀土发展篇: 坚定科学发展信念, 历练挑战危机能力," *News of the Communist Party of China* 中国共产党新闻网, last modified March 2, 2009, accessed August 29, 2012, <http://dangjian.people.com.cn/GB/132289/8892162.html>.

⁵⁷ "国务院关于促进稀土行业发展健康的若干意见," *PRC Central Government* 中国中央人民政府, last modified May 19, 2011, accessed August 29, 2012, http://www.gov.cn/jrzq/2011-05/19/content_1866997.htm; and "White Paper on China's Rare Earth Industry 中国稀土状况白皮书," *PRC State Council* 国务院, last modified June 20, 2012, accessed August 21, 2012, http://www.gov.cn/jrzq/2012-06/20/content_2165509.htm.

experience of “the century of humiliation” – which is also a century of nation-building⁵⁸ – “self-sufficiency” can be understood as “self-reliance without external influence and intervention”. With resource security being an integral part of national security, “self-sufficiency” reflects China’s historically constituted internal insecurity and anxiety as a sovereign state, and its pursuit to ensure the integrity, viability and sovereign equality of the Chinese state.

Combining “self-sufficiency” with “conservation-minded society” and “scientific development,” China has constructed a rare earth discourse which aims to “stabilize the inside and pacify the outside” (*annei rangwai* 安内攘外), so as to “cultivate both the inside and the outside” (*neiwai jianxiu* 内外兼修). Such discourse strives for internal self-reliance and external independence from foreign interference. To illustrate, “outdated production capacity” (产能落后), “disorderly production capacity expansion” (产能无序扩张), and “export underpricing” (廉价出口) have long been considered the root causes of China’s lack of discursive power over rare earth pricing control,⁵⁹ resulting in the industry’s inability to circumvent price fluctuation risk, despite being *the* major producer of the metals. This is the “inside” or *nei*. On the *wai* or “outside,” the overdependence of European countries, the U.S., Korea, and Japan on Chinese rare earths has exacerbated rare earth smuggling and illegal mining.⁶⁰ The present policy objective has been to resolve the *nei* and *wai* simultaneously.

⁵⁸ Zhang Yongjin, “Anticipating China’s Future Diplomacy: History, Theory and Social Practice,” in *China’s New Diplomacy: Tactical or Fundamental Change?*, eds. Pauline Kerr, Stuart Harris, and Qin Yaqing (New York: Palgrave, 2009), 134.

⁵⁹ See for example, “中国如何在世界赢得稀土话语权,” *China Network of Rare Earth Metals* 中国稀土门户网, last modified September 21, 2011, accessed August 29, 2012, <http://www.cnree.com/news/guonei/1/929.html>.

⁶⁰ “稀土走私完整黑色链条已形成 专家吁副总理亲管,” *China Finance Online* 中国财经金融门户, last modified October 23, 2010, accessed August 29, 2012, <http://finance.jrj.com.cn/biz/2010/10/2300318396301.shtml>.

Furthermore, at the current juncture, under the principles of “conservation-minded society” and “circular economy,”⁶¹ China has adjusted its energy strategic emphasis to increasingly focus on domestic energy diversification, conservation and efficiency,⁶² and sustainable energy technology development.⁶³ This highlights the importance of rare earths to China’s economic development.

3.2.3 The Environmental: The Real Price of China’s Rare Earths

*“Rare earth processing in China is a messy, dangerous, polluting business. It uses toxic chemicals, acids, sulphates, ammonia. The workers have little or no protection.”*⁶⁴

*“China meets 95 percent of the world’s demand for rare earth, and most of the separation and extraction is done here. So, the pollution stays in China, too.”*⁶⁵

China’s economic development strategy has begun to emphasize on being more energy efficient and environmentally friendly. Not surprisingly, environmental protection and

⁶¹ “White Paper on Energy: China’s Energy Conditions and Policies,” National Development and Reform Commission, PRC, last modified December 2007, accessed August 29, 2012, <http://en.ndrc.gov.cn/policyrelease/P020071227502260511798.pdf>.

⁶² “查道炯: ‘内外兼修’保障中国的石油安全,” Cj69.com 金牛网, last modified July 25, 2005, accessed August 29, 2012, <http://news.cf69.com/2005/07/25/00000000100010k7qy.html>.

⁶³ For example, see: David Caploe, “China – Green Technology Leader: Has the Future Arrived?,” *Economy Watch*, last modified March 26, 2010, accessed August 29, 2012, <http://www.economywatch.com/economy-business-and-finance-news/China-Green-Technology-Leader-Has-Future-Arrived-27-03.html>.

⁶⁴ Lindsey Hilsum, “Are Rare Earth Minerals Too Costly for Environment?,” *PBS Newshour*, last modified December 14, 2009, accessed August 29, 2012, http://www.pbs.org/newshour/bb/asia/july-dec09/china_12-14.html. See also: “Reuters Slideshow: China’s Rare Earth Metals,” *Reuters*, last modified October 20, 2010, accessed August 29, 2012, <http://in.reuters.com/news/pictures/slideshow?articleId=INRTXU5XY>.

⁶⁵ Zhao Zengqi, president of Baotou Rare Earth Research Institute, interviewed in “Are Rare Earth Minerals Too Costly for Environment?,” *PBS Newshour*, see supra note 59.

sustainability have been cited by the Chinese government as *the* reason for capping its rare earth export quota. Although in reality it is not the only reason, the severe environmental pollution created by rare earth mining does play a critical role in China's adopting a stringent export control and a reduced production quota as an attempt to curtail illegal mining and smuggling. Both smuggling and illegal mining are contributing factors to the severe environmental hazards of rare earth mining.

In China, the negative impact of rare earth mining on the environment is dire. According to a report published by the Chinese Society of Rare Earths, "every ton of rare earth produced, generates approximately 8.5 kilograms of fluoride and 13 kilograms of dust; and using concentrated sulphuric acid high temperature calcination techniques to produce approximately one ton of calcined rare earth ore generates 9,600 to 12,000 cubic meters of waste gas containing dust concentrate, hydrofluoric acid, sulphur dioxide, and sulphuric acid, approximately 75 cubic meters of acidic wastewater, and about one ton of radioactive waste residue."⁶⁶ In Baotou, Inner Mongolia, where China's largest rare earth deposit, Bayun Obo, is located, "all the rare earth mining enterprises produced every year approximately ten million tons of all varieties of wastewater," most of which is "discharged without being effectively treated, which not only contaminates potable water for daily living, but also contaminates the surrounding water environment and irrigated farmlands."⁶⁷ This illustrates only part of the environmental calamity and Baotou is not the only rare earth mine site in China.

While there are always many environmental issues associated with all kinds of mining activities, the unfortunate situation in China is a complicated one caused by a myriad of factors, including malignant market competition, low economic efficiency, land ownership, lack of

⁶⁶ Hurst, "China's Rare Earth Elements Industry," 16.

⁶⁷ Hurst, "China's Rare Earth Elements Industry," 16-17.

regulation, ineffective policy implementation, dispersed industrial structure, extremely complex institutional frameworks, and mining techniques that are environmentally detrimental.

China started to exploit its rare earths in the late 1950s. The early 1980s saw the rapid national economic growth under the open-door policy and the increasing demand for mineral resources. During this period, small-scaled mines, which were township and village enterprises, grew dramatically. Unregulated, these mines have suffered from numerous problems: unlicensed and irrational extraction, low recovery rates, poor safety records, and substantial environmental damage. However, it was not until 1988 that China promulgated its first environmental regulation concerning mining activities,⁶⁸ marking the commencement of legalization and standardization of mining activities in the country. Since 1988, the Chinese government has announced a series of laws and regulations that deal with mining activities and relevant environmental protection measures. Yet, despite such effort, effective enforcement of the laws has been a challenge due to China's "matrix muddle" regulatory structure.⁶⁹

In the case of rare earth mining in particular, the lax compliance with existing environmental protection measures is made complicated by low profit margin, which is the product of over-production and malignant export competition. Over-production and malignant export competition, in turn, are the consequences of having too many unregulated mining and refinery operations. For those illegal mines and refineries, environmental compliance puts pressure on the already meagre profit margin and there is neither an incentive nor government support to comply. Even the regulated SOE mines⁷⁰ – which face financial difficulties and

⁶⁸ "Provisions of the People's Republic of China on Land Reclamation 中华人民共和国土地复垦规定," *PRC Ministry of Land and Resources 国土资源部*, last modified June 25, 2004, accessed August 29, 2012, http://www.mlr.gov.cn/zwgk/flfg/tdglflfg/200406/t20040625_570348.htm.

⁶⁹ Cao Xia, "Regulating Mine Land Reclamation in Developing Countries: The Case of China," *Land Use Policy* 24 (2007): 478.

⁷⁰ State-owned enterprises.

heavy social burdens⁷¹ – are finding it challenging to follow the standards and still pose significant hazards.

3.2.4 The Economy and Resource Security: China in transition

“The consolidation of China’s rare earths sector is part of a broader national effort to shift away from this type of low value-added, high environmental impact products.”⁷²

A major concern voiced by the Chinese rare earth policy-makers, professionals and academics is the loss of pricing control⁷³. “Selling rare earths as cabbages” (稀土贱卖了白菜价)⁷⁴ is a common expression describing the phenomenon. At present, the pricing mechanism of rare earth remains consumer-oriented. In other words, despite China’s monopoly over the production of rare earths as raw materials, the price of the mineral commodity is controlled by the buyers and the quantities of purchase.⁷⁵ Many factors contributed to the underpricing, including: 1) underdeveloped environmental regulatory regimes and lax compliance, as well as cheap labour, which allowed for much lower production cost; 2) horizontally over-dispersed industrial structure, where more than a hundred upstream rare earth suppliers viciously compete for buyers, resulting in malignant price undercutting; 3) unlicensed mining and smuggling,

⁷¹ Cao Xia, “Regulating Mine Land Reclamation in Developing Countries,: The Case of China,” 477.

⁷² Leslie Hook, “China Tightens Grip on Output of Rare Earth,” *Financial Times*, accessed August 29, 2012, <http://www.ft.com/cms/s/0/1e0c8b24-d15f-11df-96d1-00144feabdc0.html#axzz17Z5jnpZP>

⁷³ For example, see: Wang Fuwei 汪福伟, “关于中国稀土出口定价权的问题探讨,” *中国集体经济* 3 (2010): 130-131; Li Zongjian and Ai Mingjuan 李宗健, 艾明娟, “中国的稀土出口定价影响力分析,” *知识经济* 3 (2010): 71; and Zhang Ping 张平, “世界稀土市场现状分析及我国的对策,” *国际贸易问题* 286, no. 10 (2006): 39-43.

⁷⁴ “中国稀土缘何卖了白菜价,” *Xinhuanet.com 新华网*, last modified October 14, 2010, accessed August 29, 2012, http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/fortune/2010-10/14/c_12656837.htm

⁷⁵ Ruan Cishang 阮次山, PhoenixTV interview 凤凰卫视, “今日新闻今日谈: 中国管制稀土出口已刻不容缓,” *Joy.cn 激动网*, last modified October 28, 2010, accessed August 29, 2012, <http://news.joy.cn/video/2013067.htm> and <http://shnews.joy.cn/video/2013068.htm>.

which exacerbate the already cutthroat intra-industry competition for buyers; 4) local corruption; and 5) export quota policy loopholes related to customs declaration, inspection and clearance.⁷⁶

For China, the major tangible ramification of underpricing is environmental destruction at great scale, human and social cost, resource depletion, and threat to non-traditional national security. Under the current leadership, as a strategy to reduce the country's dependence on [foreign] oil, China has been undergoing a green industrial revolution which is heavily dependent on rare earths and their technologically sophisticated applications. However, in order for China to achieve a sustainable circular economy that is self-sufficient in many aspects, including research and development (R&D) and downstream applications, vertical integration – upstream, midstream and downstream – of the rare earth sector is necessary.

Yet, after years of exploiting rare earths and exporting them to developed countries, despite efforts to encourage foreign joint-ventures to invest locally in midstream and downstream processing projects, China's rare earth production remains upstream, yielding low added-value and severe environmental damage. The mineral trade has not translated into meaningful technology transfer, exchange or cooperation/collaboration which are what China desperately needs for moving up along the global rare earth supply chain. The underpriced rare earths from China are processed and manufactured elsewhere in developed countries into high-technology parts and products, which are then sold to China at a price many times higher than the cost of the rare earth minerals exported. The case of neodymium magnet (Neo magnet) is illustrative. A rare-earth permanent magnet made from an alloy of neodymium, iron and boron,⁷⁷ the Neo magnet has a myriad of applications in modern technology, such as wind

⁷⁶ It is said that some foreign JVs have used the customs policy loopholes to export certain restricted REEs in the form of alloys. The restricted REEs in question can later be extracted from the alloys using separation techniques. See: “稀土变合金 “合法” 流失 变相走私漏洞待堵,” *China.org.cn 中国网*, last modified October 13, 2010, accessed August 29, 2012, http://www.china.com.cn/economic/txt/2010-10/13/content_21111687.htm.

⁷⁷ Nd-Fe-B-based permanent magnetic materials.

turbines, computer hard disks, magnetic resonance imaging (MRI), loudspeakers and headphones, and cordless tools. The production chain of Neo magnets comprises of, in order: smelting, milling, molding, sintering, post-processing, and metal surface treatment. Where the mining and simple processing (smelting and milling) of neodymium are done in China, foreign joint-ventures – such as the French Rhodia Group and the Japanese Showa Denko⁷⁸ – would then transport the upstream products elsewhere for mid- and downstream processing and manufacturing.⁷⁹ The finished products, Neo magnets, with huge added-value, are then sold to China. In short, China's green industrialization is technologically heavily dependent on the West and Japan. For China, the situation poses a threat to its economic development and national security in the long-term.

To counter the technological weaknesses, pricing disadvantage and environmental problems, China has conducted a series of reforms and restructurings at both government and industry levels. Since 1998, the government has gradually tightened export restrictions on rare earth oxide.⁸⁰ In 2002 the *Interim Provisions on the Administration of Foreign-Invested Rare-Earth Industry* was released,⁸¹ prohibiting foreign companies from establishing rare earth extracting enterprises and investing in rare earth smelting and separating projects in China, as an attempt to restrict foreign rare earth JVs to invest in midstream and downstream processing. In

⁷⁸ Both are world leading chemical engineering firms.

⁷⁹ “‘资源换不来技术’凸显中国稀土产业尴尬现状,” *Xinhuanet.com* 新华社, last modified November 26, 2010, accessed August 29, 2012, http://news.xinhuanet.com/fortune/2010-11/26/c_12819834.htm.

⁸⁰ Yen Jiannin 严江宁, “部级稀有金属协调机制将改变中国稀土产业格局,” *Hexun.com* 和讯新闻, last modified December 2, 2010, accessed August 29, 2012, <http://news.hexun.com/2010-12-02/125944768.html>.

⁸¹ “Interim Provisions on the Administration of Foreign-Funded Rare-Earth Industry 外商投资稀土行业管理暂行规定,” *Law Info China* 北大法律英文网, accessed August 29, 2012, <http://www.lawinfochina.com/law/display.asp?db=1&id=2486>.

2009, export quota was slashed by 40 percent comparing to 2008. Also, 2010 sees a fifteen to twenty percent increase in export duties on rare earths.⁸²

At the state ministerial level, an inter-ministerial intermediary office was established under the Ministry of Industry and Information Technology (MIIT), mediating between ministries involved in the management and administration of rare earths, including the MIIT, Ministry of Land and Resources (MLR), Ministry of Commerce (MOC), Ministry of Environmental Protection, National Development and Reform Commission, and the General Administration of Customs.⁸³

Moreover, since 2002 the rare earth sector underwent a period of horizontal consolidation through merger and quota licensing restriction, reducing the number of processing facilities from close to a hundred down to twenty, and forming regional cartels⁸⁴ led by three state-owned enterprises: CHINALCO (中铝), Minmetals (五矿) and NFC (中色).⁸⁵ Establishment

⁸² “稀土出口关税今年加增 15%-20%,” *Uninf.com* 优府, last modified November 17, 2010, accessed August 29, 2012, <http://www.uninf.com/article/2010-11-17/201011171047171111448.html>.

⁸³ The MIIT is in charge of overall production indicator, the MLR decides the mining indicator, the MOC sets the export quota, and the Customs Office deals with export inspection. See: “稀土走私黑链浮现: 央企人员曝 4 大部委利益关系错综复杂,” *Phoenix Infonews* 凤凰网, last modified October 28, 2010, accessed August 29, 2012, <http://finance.ifeng.com/news/special/xitu/20101208/3025066.shtml>; and Sun Guodong 孙国东, “中国稀土出口及海关监管政策,” *China Customs Lawyer* 中国海关律师网, last modified September 16, 2010, accessed August 29, 2012, <http://www.customslawyer.cn/zxft/ft2010/201009/41930.html>.

⁸⁴ In 2002, “关于组建全国性稀土企业集团的请示,” a joint proposal by the National Development and Reform Commission, the Ministry of Finance, the Ministry of Land and Resources, and the Ministry of Foreign Trade and Economic Cooperation (国家计委、财政部、国土资源部、外经贸部), was approved in principle by the State Council. See: “中国稀土行管体制将有巨变 南北两集团组建在即,” *Sohu.com* 搜狐, last modified October 24, 2002, accessed August 29, 2012, <http://news.sohu.com/65/69/news203856965.shtml>; “稀土七雄,” *China Rare Earth Network* 中国稀土, last modified April 9, 2010, accessed August 29, 2012, <http://www.cre.net/show.php?contentid=58620>; “中国稀土整合将提速 90 家企业拟变为 20 家,” *Tencent Finance* 腾讯财经, last modified September 9, 2010, accessed August 29, 2012, <http://finance.qq.com/a/20100909/000883.htm>; “11 月底全面完成稀土专项整治 战略矿产保护机制初成,” *China Finance Online* 金融界, last modified November 19, 2010, accessed August 29, 2012, <http://big5.jrj.com.cn/gate/big5/finance.jrj.com.cn/biz/2010/11/1903118598538.shtml>; “环保新标准将催生稀土行业大整合 1/3 企业或出局,” *China.org.cn* 中国网, last modified July 22, 2010, accessed August 29, 2012, http://www.china.com.cn/economic/txt/2010-07/22/content_20548571.htm.

⁸⁵ CHINALCO = 中国铝业公司 (China Aluminum Corporation); MINMETALS = 中国五矿集团公司 (China Minmetals Corporation); NFC = 中国有色金属建设有限公司 (China Nonferrous Metal Industry's Foreign Engineering Construction Co. Ltd). For discussions on the roles these SOEs play in the REEs industry restructuring,

of a national rare earth industry association is underway,⁸⁶ serving as a bridge between the industry and the government. The competitions between the local state-owned assets holdings companies (LSAHCs)⁸⁷ and the SOEs have prompted the central government to look into rescinding local mining rights and consolidating the management of mining rights under the central state level.⁸⁸ Furthermore, a unified pricing mechanism is being planned.⁸⁹ The primary goal of the reforms is to stabilize the inside first.

3.2.5 China's Intent

The internal restructuring described above is reflected in and influenced by the external dealings (ie. export restrictions and international market). To determine what China wants to achieve, the economic must be considered in conjunction with the historical, ideological and environmental. Through restricting exports, China actually intends to “lose” its monopoly in the production of rare earth metals and attempts to diversity the upstream global supply chain of the

see: “稀土竞争新格局：三央企主导稀土加工,” *Shanghai Stock Information Service 中国证券网*, last modified October 16, 2010, accessed August 29, 2012, <http://www.cnstock.com/index/gdxw/201010/904519.htm>; “未来稀土五分天下：五矿、江铜、包稀、中色、中铝,” *Hudong.wlstock.com 万隆证券网*, last modified November 23, 2010, accessed August 29, 2012, <http://hudong.wlstock.com/StockBar/d8252954.aspx>; “稀土整合五矿系优势明显 三分天下必有其一,” *China Times 华夏时报*, last modified March 16, 2012, accessed August 29, 2012, <http://www.chinatimes.cc/licai/licaijing/zhengquan/2012-03-16/29460.shtml>.

⁸⁶ “中国稀土行业协会等待民政部最后审批,” *China Network of Rare Earth and Precious Metals 中国稀贵金属交易网*, last modified August 23, 2010, accessed August 29, 2012, <http://www.cnrpm.com/news/6874.html>.

⁸⁷ Local state-owned assets holding enterprises = 地方国资控股的企业. Currently mining rights are vested within local state-owned companies, including the Inner Mongolia Baotou Steel Rare Earth Group (包钢稀土), Jiangxi Copper Co. (江西铜业), Rising Nonferrous Metals Share Co., Ltd. (广晟有色), and Guangxi Nonferrous Metals Group Co. Ltd. (广西有色集团).

⁸⁸ “稀土兼并重组细则或年内出台 采矿权拟收归中央,” *Sina.com 新浪财经*, last modified October 15, 2010, accessed August 29, 2012, <http://finance.sina.com.cn/chanjing/cyxw/20101015/23248788755.shtml>.

⁸⁹ “包钢稀土与江西铜业将制定统一的稀土定价机制,” *The Wall Street Journal 华尔街日报中文版*, last modified August 10, 2010, accessed August 29, 2012, <http://cn.wsj.com/gb/20100810/BCH018382.asp>.

metals to include Canada, Australia and the U.S.⁹⁰ Combined with China's current export restriction and the proposed unified pricing mechanism,⁹¹ a diversified upstream supply chain will further increase the price of rare earths, therefore is conducive to upward price correction for Chinese rare earths. Such price correction is correlated to higher rare earth production cost in developed countries due to stricter environmental protection regulations. The upward price correction will in turn create room for the Chinese rare earth industry to: 1) correctly price the pollution and labour costs; and 2) implement necessary environmental protection measures at the local level, such as land reclamation and environmental impact assessment. In addition, the price correction and global source diversification might help to alleviate rare earth smuggling.

Some have pointed out that the pricing correction will make the Chinese upstream rare earth export less price competitive and therefore will repel a certain amount of interested foreign importers.⁹² However, it can be argued that this is exactly what the Chinese government intends to happen. First, underpriced upstream rare earth trade only accounts for a negligible portion of China's total foreign trade volumes (9.6 out of 14285.5 billion USD, 2008 figure).⁹³ The strategic value of rare earths makes the rare earth export trade an issue beyond profit making. Second, the diversification of global upstream rare earth supply will provide China with the opportunity to diversify its upstream rare earth supply source, as a means to conserve domestic

⁹⁰ 商务部新闻发言人姚坚:“建立国际经济秩序需要全球的合作,所以,一方面,中方希望其他拥有稀土资源的国家也积极开发利用本国的稀土资源,共同承担全球稀土供应的责任。” See:“国际矿业大会中国反覆讲‘开放’,” *Economic Information 经济参考报*, last modified November 17, 2010, accessed August 29, 2012, http://big5.xinhuanet.com/gate/big5/jjckb.xinhuanet.com/2010-11/17/content_270397.htm

⁹¹ This is in addition to the restructuring and nationalization of the REEs industry. These elements have to work in conjunction for the price correction to occur.

⁹² Chris Buckley, “Analysis: China's rare earth hammer hits economic raw nerve,” *Reuters*, last modified October 28, 2010, accessed August 29, 2012, <http://www.reuters.com/article/idUSTRE69R0DD20101028>

⁹³ Qiu Xiaomei 邱晓梅, “2008 年 1~12 月中国稀土产品出口统计,” *稀土信息* 3 (2009): 44; and “2008 年 12 月进出口简要情况,” *Comprehensive Department of the PRC Ministry of Commerce 商务部综合司*, last modified January 14, 2009, accessed August 29, 2012, <http://zhs.mofcom.gov.cn/aarticle/Nocategory/200901/20090106003675.html>.

reserve.⁹⁴ Put another way, it is possible that in the medium to distant future, China will integrate a “going-out” approach into its rare earth policy, as it has done with its oil-gas policy.

3.3 Chapter Conclusion

Changes to China’s rare earth policy did not attract much media attention until the 2010 Diaoyutai collision crisis and the alleged embargo. Neither the Chinese nor the Japanese government released much detail on the embargo: the alleged embargo was never official and what was reported was speculative at best. But the speculation was enough to portray China as a menacing dragon clouting onto precious rare earths and bullying those who need them. Not surprisingly, with a WTO dispute judgement still pending at the time,⁹⁵ China’s rare earth policy was seen provocative and the country was bombarded with criticisms. Nevertheless, as this thesis has shown, china’s recent rare earth policy changes and developments are not as drastic as portrayed by the Western and Japanese media. The policy changes at most are adjustments among a long string of policy progressions since the 1990s.

Nevertheless, in the West and Japan, the overwhelming media and political attention on the embargo controversy and “China threat” has rendered the dreadful reality of China’s rare

⁹⁴ “商务部称中国稀土储备仅能维持 20 年可能需进口,” *China.org.cn 中国网*, last modified October 18, 2010, accessed August 29, 2012, http://www.china.com.cn/policy/txt/2010-10/18/content_21143248.htm; and “我国明年或设稀土储备制度 建立开发联动机制,” *Tencent Finance 腾讯财经*, last modified October 26, 2010, accessed August 29, 2012, <http://finance.qq.com/a/20101027/000056.htm>.

⁹⁵ The European Union, Mexico and the U.S. filed a case with the WTO in 2009 concerning the Chinese monopoly and trade restrictions over a number of raw materials. Having failed to issue a judgement within the six-month time frame, the WTO finally released its decision in July, 2011. See: “WTO Panel Rules against China’s Export Restrictions on Raw Materials,” *Bridges Weekly Trade News Digest* 15, no. 25, International Centre for Trade and Sustainable Development, last modified July 6, 2011, accessed August 29, 2012, <http://ictsd.org/i/news/bridgesweekly/110043/>; Liu Lianying 刘连英 “WTO 框架内稀土保卫战暗潮汹涌,” *Sina.com. 新浪财经*, last modified July 7, 2011, accessed August 29, 2012, <http://finance.sina.com.cn/roll/20110707/105210108962.shtml>; “WTO case against China gathers steam,” *Sina.com 新浪*, last modified June 24, 2009, accessed August 29, 2012, <http://english.sina.com/china/p/2009/0623/250585.html>; and “WTO delays ruling in rare earths dispute to April,” *Mining Weekly*, last modified October 22, 2010, accessed August 29, 2012, <http://www.miningweekly.com/article/wto-delays-ruling-in-rare-earths-dispute-to-april-2010-10-22>

earth production neglected in various journalistic publications and policy analyses. Mainstream Western and Japanese news and policy discussions about the alleged embargo have centred on strategic, if not contentious, responses towards China's rare earth policy, disregarding the social, economic, environmental and historical factors that have shaped China's policy. The result is the impressive discrepancies between the Chinese and Japanese-Western media over the representation and framing of the collision crisis and China's REEs policy. For example, the linkage between the dire environmental and human impact of rare earth production, and its political economy, has been a subject of relentless discussion in the Chinese media, yet underreported in the Japanese and Western media.

Chapter Four: Discussion

4.1 Results

News reports were organized into pre-collision and post-collision categories (see Table 4.1).

Table 4.1: Number of News Articles on China's REEs Policy Before and After the 2010 Pinnacle Islands Collision

News Outlets	Total No. of Articles	Pre-collision	Post-collision
Xinhua	53	24	29
China Daily	52	15	37
China Rare Earth Network	85	50	35
Nikkei Keizai Shimbun	30	5	25
Kyodo News	55	3	52
Wall Street Journal	36	7	29
New York Times	34	4	30
Globe and Mail	10	1	9
Reuters	78	16	62

4.1.1 Pre-collision

28 out of the 158 (17.7%) Western media news articles, as well as 8 out of the 85 (9%) Japanese press reports, on China's REEs policy were published prior to the collision incident occurred on September 7th, 2010. On the other hand, of the 190 Chinese press reports, 89 (46.8%) were released before the incident. The number of articles that used certain key words/ideas (as identified earlier in chapter two) is shown in Table 4.2.

Table 4.2: Number of Pre-Collision News Reports that Have Keywords/Ideas Identified in Chapter Two

Key Words/ Ideas	<u>Chinese Press</u>	<u>Japanese Press</u>	<u>Western Press</u>
Export Restriction	13 (14.6%)	8 (100%)	15 (53.6%)
Strategic Material	30 (33.7%)	2 (25%)	15 (53.6%)
[Production] Monopoly	14 (15.7%)	5 (62.5%)	8 (28.6%)
Environmental Damage	30 (33.7%)	1 (12.5%)	2 (7%)
Diversification of Sources	12 (13.4%)	1 (12.5%)	11 (39.2%)
Industry Restructuring	75 (84.2%)	3 (37.5%)	10 (35.7%)
Smuggling	7 (9%)	0	0

It needs be noted that the connotation of the term “monopoly” is different in the Chinese media from its Japanese and Western counterparts. In the Japanese and Western media, “monopoly” is understood along the lines of “China controls about 97 percent of the rare earth’s supplies,”⁹⁶ “China is believed to have 97 percent of the world’s total rare earth ores,”⁹⁷ “China holds about 90 percent of the world’s reserves of rare earth minerals,”⁹⁸ and “China now supplies more than 90 percent of the world’s rare earth metals.”⁹⁹ In the Chinese media, the idea of “monopoly” is contextualized within the discrepancy between production supply and the amount of reserve held, and is considered as a burden. For example, in an August 2010 report, it was said that “China’s rare earth resource reserve now only accounts for about 31 percent of the

⁹⁶ “Rare Earths Crucial in Drive for Green Gadgets,” *Reuters News*, last modified September 8, 2009, accessed July 5, 2012, Dow Jones Factiva News and Information Database (LBA0000020100812e68c0006f).

⁹⁷ “China to Restrict Rare Earth Mining to State Firms,” *Reuters News*, last modified June 2, 2010, accessed July 5, 2012, Dow Jones Factiva News and Information Database (LBA0000020100602e6620005z).

⁹⁸ “China’s Wen Soothes on Rare Earths, Investment Worries,” *Reuters News*, last modified July 17, 2010, accessed July 5, 2012, Dow Jones Factiva News and Information Database (SGTD000020100719e67j0000j).

⁹⁹ “China Export Curbs on Rare Earth Metals Drive Up Prices,” *Nikkei Report*, last modified June 3, 2010, accessed July 5, 2012, Dow Jones Factiva News and Information Database (NKR000020100603e6630003y).

global total after supplied for most of the world's demand for years. [...] China produced 124,800 tonnes of rare earth in 2009, account for 95 percent of the world's demand.”¹⁰⁰

“Industry restructuring” and “environmental damage” were constantly brought up by the Chinese media, while the Japanese and Western media mentioned “environmental damage” merely in passing without description. Neither the Western nor the Japanese media reported on REEs smuggling, which is an issue considered by the Chinese government as a major national security challenge.¹⁰¹

4.1.2 Post-collision

The number of articles that used certain key words/ideas (as identified in the chapter on methods) in their reports after the collision is shown in Table 4.3.

Table 4.3: Number of Post-Collision News Reports that Have Keywords/Ideas Identified in Chapter Two

Key Words/ Ideas	<u>Chinese Press</u>	<u>Japanese Press</u>	<u>Western Press</u>
Embargo/Ban	6 (5.9%)	50 (64.9%)	56 (43.1%)
Export Restriction	57 (56.4 %)	32 (41.5%)	90 (69.2%)
Strategic Material	53 (52.4%)	36 (46.7%)	80 (61.5%)
[Production] Monopoly	28 (27.7%)	42 (54.5%)	84 (64.6%)
Territorial Dispute	1 (0.5%)	39 (50.6%)	52 (40%)
Environmental Damage	51 (50.4%)	6 (7%)	37 (28.4%)
Diversification of Sources	30 (29.7%)	39 (50.6%)	67 (51.5%)
Industry Restructuring	86 (85.14%)	3 (3.8%)	18 (13.8%)
Smuggling	8 (7.9%)	0	10 (7.6%)

¹⁰⁰ “China Owns Only 31 Percent of World’s Rare Earth Reserve,” *Xinhua News*, last modified August 4, 2010, accessed July 5, 2012, Dow Jones Factiva News and Information Database (XNHA000020100804e6840018h).

¹⁰¹ For example, see “青岛海关破获大案 4000 多吨稀土走私日本被查,” *Xinhua Shandong 新华网山东频道*, last modified September 16, 2010, accessed August 20, 2012, http://www.sd.xinhuanet.com/qd/2010-09/16/content_20915152.htm.

After the fishing boat collision, “monopoly” was one of the top three messages communicated by both the Japanese and the Western media regarding China’s REEs policy. Other major focal points include export restriction, embargo, territorial dispute, and strategic material. In addition, 38 Western press articles (29.2%) mentioned “export restriction/embargo” with “territorial dispute”, 29 articles (22.3%) linked “monopoly” with “export restriction/embargo” and “territorial dispute”, and 60 articles (46.1%) discussed “monopoly” and “strategic material” within close proximity.

Among the Japanese press reports, 36 mentioned “export restriction/embargo” with “territorial dispute” (46.7%), 21 articles linked “monopoly” with “export restriction/embargo” and “territorial dispute” (27.2%), and 23 articles discussed “monopoly” and “strategic material” together (29.9%).

In contrast, the Chinese media placed emphasis on the linkages between industry restructuring, environmental damage and export restriction: 56 reports related export restriction measures to the central government’s attempt to reform the industry (55.4%), and 41 news stories attributed environmental damage as a primary reason for industry reform and export restriction measures (40.6%).

4.2 Conflicting Media Representations

Through framing, the Japanese and Western media constructed a reality that China is a resource-hoarding monopoly who was acting on national interests and unwilling to abide by the international trade regimes it signed up for. Such framing had existed prior to the fishing boat collision, and was perpetuated and further exploited during the development of the collision conflict, culminating at the height of the conflict when China reportedly halted REEs shipments in an attempt to make Japan yield, and to which Japan did. Paul Krugman’s op-ed piece at the

*New York Times*¹⁰² was but one example of the reinforcement of the frames – monopoly, resource-hoarding, unwilling to cooperate in trade, violating WTO rules – which had been created, selected and communicated long before the collision occurred, and have become the dominant interpretation of China’s REEs policy. The consequence is an overtly simplified and limited presentation of an extremely complicated and difficult policy issue, preventing effective knowledge transfer and a public political discourse encompassing the many complex facets of China’s REEs policy, which may have been conducive to a better understanding of the unique policy issues surrounding rare earth mining.

On the other hand, since before the collision the Chinese media had recognized in its reporting the need to restrict export – by tariffs and quota – as a measure, among many others, to restructure the domestic REEs industry. Dire environmental damage, smuggling, illegal mining have been a continuing emphasis in the Chinese press as reasons for restructuring the industry. Unlike its Japanese and Western counterparts which conflated “production monopoly” with “resource hoarding,” the Chinese press framed “monopoly” as a burden rather than an advantage, and presented the country’s export restriction measures as a strategy that aims to discourage overreliance on Chinese REEs supply and to encourage supplies from elsewhere like the U.S., Australia, Canada, India and Vietnam.

The Chinese press’ stance on the REEs policy issues had been consistent throughout the three months before and after the collision incident. After the collision and the reportedly stopped shipments, the Chinese press denied and downplayed the linkage between the fishing boat collision and the reportedly stopped shipments of REEs to Japan, and continued to stress the critical need to restructure the industry.

¹⁰² Paul Krugman, “Rare and Foolish.”

Applying the concepts of framing and sensemaking, it can be argued that the way the Chinese, Japanese and Western news reports framed and presented the facts surrounding China's REEs trade was influenced by the journalists' knowledge and perceptions, as well as access to information, about the REEs mining in general and the Chinese REEs industry in particular. Due to the amount of REEs research that is in abundance in China¹⁰³ – including TV news commentaries and discussion,¹⁰⁴ industry-related websites,¹⁰⁵ academic research (journals, conferences, and books),¹⁰⁶ digital and print news reports,¹⁰⁷ government policy documents,¹⁰⁸ and discussion forums¹⁰⁹ – but is in shortage in the West and Japan, Chinese journalists have access to greater amount of information regarding rare earth mining than their Japanese and Western colleagues.

Furthermore, the discrepancies between the Chinese journalists' knowledge and perceptions about the issue, and their foreign counterparts, were also affected by their organizational environments, including cultural and political consensus. The closer the political-cultural distance and values are between countries, the closer the cultural and political consensus, and the better chance particular issues and events are deemed important and receive media

¹⁰³ See *China Rare Earth Network* for a glimpse of the research that has been done in the area, <http://www.cre.net>.

¹⁰⁴ For example, see: “新闻今日谈 2010-10-28 中国管控稀土 美国绕着弯“找茬”, Phoenix Network, *Youtube.com*, last modified October 28, 2010, accessed July 23, 2012, <http://youtu.be/nJ8r9RSbuVo>.

¹⁰⁵ Such as the *China Rare Earth Network*, <http://www.cre.net>.

¹⁰⁶ For example, see a list of news reports aggregated by the *China Rare Earth Network*, <http://www.cre.net/list.php?catid=15>.

¹⁰⁷ For example, see a list of publications available through the China Rare Earth Network's online catalogue (<http://www.cre.net/list.php?catid=18>), as well as Phoenix Network's special website, entitled *Rare Earth Trade is not Just About Business* 稀土买卖不只是生意, dedicated to REEs mining (<http://finance.ifeng.com/news/special/xitu/>)

¹⁰⁸ *Supra* note 52.

¹⁰⁹ Such as *China Rare Earth China Online* 中国稀土论坛, <http://www.cs-re.org.cn/rebbs/index.php>.

attention¹¹⁰. This is evident in the overlapping of frames between Japanese and Western media concerning China's REEs policy, as well as in the differences in framing between Chinese media on the one hand, and Japanese and Western media on the other.

4.3 Chapter Conclusion

“In mediated public diplomacy, political and rhetorical acts are part of the same strategy and have the same goal,”¹¹¹ that is to gain political influence and control over contested issues. This is especially true in diplomatic conflicts where antagonist state actors ferociously compete in the political communication arena for recognition and sympathy from foreign state actors in order to sway international policy-making and public opinion. Domination in the political communication arena is contingent upon gaining access to media attention¹¹² and influencing the sensemaking and meaning construction (framing) of other media actors towards a preferred redefinition of organizational reality.¹¹³

¹¹⁰ Tamir Sheafer and Itay Gaby, “Mediated Public Diplomacy,” 447-449.

¹¹¹ Tamir Sheafer and Itay Gaby, “Mediated Public Diplomacy,” 447.

¹¹² Tamir Sheafer and Itay Gaby, “Mediated Public Diplomacy,” 448.

¹¹³ Sally Maitlis, “Triggers and Enablers of Sensegiving in Organizations,” *Academy of Management Journal* 50, no. 1 (2007): 57.

Chapter Five: Conclusion

This thesis set out to investigate the differences in news reporting between China, Japan and the West over the 2010 REEs controversy. Perhaps the most obvious implication of this examination based on sensemaking and framing is the revelation that, like their audiences, journalists and political elites engaged in political communication and diplomatic confrontations, respectively, are constrained by their own knowledge, experiences and perceptions, and tend to selectively “listen” to each other, if not at all. Most of the time, instead of communicating communicatively, antagonist states engage in competitive monologues and talk past each other. Their efforts to communicate and resolve conflicts fail because as recipients of messages, they are like leaky bucketheads, or worse, recalcitrant ones. This can be attributed to the often forgotten fact that, “when it comes communication, quid pro quo is everything; if you would ask me about my world on my term, [then I would do the same].”¹¹⁴ Yet, attempting to understand and learn about the other’s reality is the basis for establishing a trust relationship conducive to conflict resolution.

5.1. Conceptual Interest

In recent years, the dynamics of social media and its role in changing politics and political processes are getting noticed by political public relations practitioners, politicians and academics alike,¹¹⁵ and have been put to applications such as political campaign (eg. the Barack Obama election campaign) and public diplomacy (eg. the U.S. State Department’s Digital Outreach Team).

¹¹⁴ Brenda Dervin, “Connecting with Specific Publics: Treating Communication Communicatively” (talk given at Eastern Washington University, February 10, 2011), *Youtube.com*, accessed August 19, 2012, <http://youtu.be/foyH6eoIseQ>.

¹¹⁵ For example, see: Clay Shirky, “The Political Power of Social Media,” *Foreign Affairs* 90, no. 1 (2011): 28-41.

In the era of Web 2.0, information dissemination and exchange are participatory, collaborative, instantaneous, pluralistic and multilateral; a state actor's attempt to cultivate persuasion and influence is subject to the noises from multiple non-state actors. Public diplomacy, which reflects "an international actor's attempt to manage the international environment through engagement with a foreign public," is no longer one-way communication and its effectiveness is symbiotically dependent on soft power. Several studies – including Sheaffer and Gaby (2009), Wang (2011),¹¹⁶ Dale (2009),¹¹⁷ Khatib (2011),¹¹⁸ and Digital Diplomacy Forum¹¹⁹ – demonstrate that, under the current global communication infrastructure circuit, public diplomacy indeed is increasingly interactively mediated¹²⁰. In the context of public diplomacy 2.0, soft power – composed of credibility, trustworthiness and political-cultural distance – becomes the currency of political competition and representative of political strength¹²¹. These essential measures of a state actor's soft power rely on media and communication outlets for their cultivation, leverage, defense and restoration, because communication outlets are what ultimately package and disseminate the information that form perceptions¹²².

¹¹⁶ Wang Wen 王文, "Web2.0 时代的社交媒体与世界政治," *Foreign Affairs Review 外交评论* 6 (2011): 65-76.

¹¹⁷ Helle Dale, Public Diplomacy 2.0: Where the U.S. Government Meets 'New Media'. *The Heritage Foundation Backgrounder* 2346, accessed August 20, 2012, <http://www.heritage.org/research/reports/2009/12/public-diplomacy-2-0-where-the-us-government-meets-new-media>.

¹¹⁸ Linda Khatib, William Dutton, and Michael Thelwall, "Public Diplomacy 2.0: An Exploratory Case Study of the Digital Outreach Team," *Stanford University CDDRL Working Paper* (2011), last modified January 2011, accessed August 20, 2012, http://cddrl.stanford.edu/publications/public_diplomacy_20_an_exploratory_case_study_of_the_digital_outreach_team.

¹¹⁹ *Digital Diplomacy Forum*, <http://www.digitaldiplomacy.org/>.

¹²⁰ Sheaffer and Gaby, "Mediated Public Diplomacy," 447.

¹²¹ Craig Hayden, *The Rhetoric of Soft Power: Public Diplomacy in Global Contexts* (Lanham: Lexington Books, 2011), 8.

¹²² Sheaffer and Gaby, "Mediated Public Diplomacy," 447-449.

However, soft power cannot be sole-sourced to public diplomacy institution¹²³. Elaborating on this contention, Kenjiro Monji (2009)¹²⁴ argues that “the wellspring of soft power lies in the private sector, so any attempts to exercise this power at the national level should be premised on working closely with the private sector.” The prevalence of social media also transformed the traditional public/private partnership in public diplomacy and rendered such partnership ever more complex, entangled and privatized. Before, the main communication channels for public diplomacy were broadcasting and print media, now, social media has become indispensable in the designing and execution of public diplomacy. Ideological engagement has largely replaced ideological warfare.

Soft power and public diplomacy nowadays, therefore, are heavily dependent on social media and its potency is measured by audience acceptance and perceptions. Moreover, the evolution of the internet has transformed the audience from passive receptacles of messages to active participants who not only seek and interpret information but also create them. State actors no longer have monopoly in the production and dissemination of information.

In light of the technological impact on public diplomacy, communication theories such as sensemaking and framing offer tremendous utilities in the design, planning and evaluation of public diplomacy strategies. In particular, audience-centred communication framework like sense-making provides practical insights into information-users’ behaviours as well as their information needs and interpretive processes. Without an understanding of the audience’s needs, perceptions and behaviours, it is much more difficult to construct messages conducive to cultivate soft power and to implement effective public diplomacy.

¹²³ Craig Hayden, *The Rhetoric of Soft Power: Public Diplomacy in Global Contexts* (Lanham: Lexington Books, 2011), 109.

¹²⁴ Kenjiro Monji was the Japanese Ambassador to the State of Qatar and former Director-General of Japan’s Public Diplomacy Department, quoted in Craig Hayden, *The Rhetoric of Soft Power*, 109.

5.2 Policy Implications

5.2.1 West and Japan

For the West and Japan, concerning rare earth mining, there is a need to develop a collaborative partnership with China to facilitate knowledge exchange and dissemination, for China has vast experience in REEs production and various relevant policy issues. Considering the uniqueness of rare earth mining, it is also important for journalists who report on the subject to actively move beyond their organizational constraints to present the China's REEs policy as multidimensionally as possible. Keith Bradsher, the Hong Kong bureau chief of the *New York Times*, whose reports on China's REEs mining are perhaps the most comprehensive and integrative to date, covering many REEs policy issues, including smuggling, illegal mining, and dire environmental destruction, faced by the Chinese authorities. Yet REEs reporting like that of Bradsher is rare in the Western and Japanese media.

5.2.2 China

In analyzing and anticipating China's conduct in the international relations in general, and its resource behaviour specifically, the idea of "China threat" (masquerading now as the "rise of China" and China's "soft power") has policy implications.¹²⁵ Partly as a consequence of China's policy-making institutional complexities and its unprecedented and dynamic socioeconomic transformation, deconstructing and anticipating China's diplomatic conduct has always been a "hazardous enterprise, whatever theoretical tools are available" (Zhang 2009).

¹²⁵ Zhang Yongjin, "Anticipating China's Future Diplomacy" 132.

The media portrayal of China as a menacing dragon¹²⁶ with an insatiable hunger for resources and power/dominance, combined with cultural and political distance, casts cognitive constraints on understanding important Chinese policies, such as rare earth industry restructuring, that have global repercussions.

Even to date, the communication on Chinese rare earth policy remains monologic, with the West/Japan seeing China as an aggressive manipulator and vow to retaliate through the WTO, and China perceiving the West/Japan as bullies from which it must defend or else risk being taken advantage of. Nevertheless, the misinformation and miscommunication between China on the one side, and the West/Japan on the other, is not entirely the result of cognitive biases and media ignorance on the part of the West/Japan. China's limited, if not lack of, global internet strategy prohibited the country to engage in effective knowledge exchange with foreign non-state actors such as journalists. Such barrier to engagement is in part a consequence of the lack of web interoperability between China and the West/Japan, which is caused by China's censorship over YouTube, Twitter, Facebook, Plurk, and Google. Language barrier between China and the West/Japan also prevents Chinese search engines like Baidu and microblogs like Sina Weibo from spreading its messages to the West/Japan, while the U.S. and Europe are already using Sina Weibo to spread their messages in China. In essence, although China has become aware of the importance of political public relations and public diplomacy – a point stressed by President Hu Jintao in 2007 during the 17th National Congress¹²⁷ – without a global internet strategy, it would be difficult for China to build soft power successfully and to implement public diplomacy effectively. In Bill Bishop's words, it is "hard to win hearts and

¹²⁶ Peter Hays Gries, "Social Psychology and Identity-Conflict Debate: Is a China Threat Inevitable?," *European Journal of International Relations* 11, no. 2 (2005): 235.

¹²⁷ "蒋建国：推进文化体制改革，提高国家文化软实力," *PRC General Administration of Press and Publication 中华人民共和国新闻出版总署*, last modified November 22, 2010, accessed August 20, 2012, <http://www.gapp.gov.cn/cms/html/21/3297/201011/724811.html>.

minds when you censor Twitter and Facebook, language would be a barrier, and no major Chinese internet firms would succeed in foreign markets.”¹²⁸

What can China do? Obviously China has rational reasons to control the presence and uses of major Western social media in China. For the Chinese state to see Web 2.0 diplomacy as an opportunity that outweighs the challenges, it has to have confidence in its capacity to defend its internet sovereignty, to raise cybersecurity and be on guard against a WikiLeaks-style strategic crisis.¹²⁹ This confidence is dependent in part on the maturity of government and private public relations practices, especially in the areas of crisis communication, reputation management and image building. The Chinese authority’s knowledge about crisis management in the era of Web 2.0 has improved significantly, as evident in the 2008 Sichuan Earthquake. But there is much to learn, and public relations in China is still an emerging field both in practice and research.

A short term strategy for China may be to proactively engage major foreign media and other non-state actors during a diplomatic conflict like the 2010 REEs controversy. China also needs to build a different, positive image about the Chinese nation that goes beyond its accomplishment of modernization, and develop the communication capacity necessary to maintain and manage its hard-earned reputation.

¹²⁸ Adam Segal, “China Tries Twitter Diplomacy?,” *The Diplomat Blogs*, last modified February 4, 2012, accessed August 20, 2012, <http://thediplomat.com/china-power/china-tries-twitter-diplomacy/>.

¹²⁹ Segal, “China Tries Twitter Diplomacy?”

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Appendix: Geographies, Agencies, and People and Political Figures Involved in the 2010 Pinnacle Islands Collision Crisis

Names		Roles or Titles during the 2010 Pinnacle Islands Collision Crisis	
<u>English Romanization</u>	<u>Chinese Original</u>	<u>English Term</u>	<u>Chinese Original</u>
Diaoyutai Islands	钓鱼台	Pinnacle Islands	n/a
Minjinyu 5179	闽晋渔 5179 号	Civilian fishing trawler	中國拖網式漁船
Zhan Qixiong	詹其雄	Captain	n/a
Song Tao	宋涛	Deputy Foreign Minister	外交部副部长
Hu Zhengyao	胡正跃	Assistant to Foreign Minister	外交部部长助理
Yang Jiechi	杨洁篪	Foreign Minister	外交部部长
Wang Guangya	王光亚	Deputy Foreign Minister	外交部副部长
Liu Zhenmin	刘振民	Assistant to Foreign Minister	外交部部长助理
Dai Bingguo	戴秉国	State Councillor	國務院國務委員
Li Jianguo	李建国	Vice Chairperson of the Standing Committee of the National People's Congress	全國人民代表大會常務委員會副委員長
<u>English Romanization</u>	<u>Japanese Original</u>	<u>English Term</u>	<u>Japanese Original</u>
Senkaku Islands	尖閣諸島	Pinnacle Islands	n/a
Yonakuni	よなくに	JCG Patrol Vessel	n/a
Mizuki	みずき	JCG Patrol Vessel	n/a
n/a	石垣海上保安庁	Ishigaki Maritime Safety Agency	n/a
Niwa Uichirou	丹羽宇一郎	Ambassador to China	n/a

Names		Roles or Titles during the 2010 Pinnacle Islands Collision Crisis	
<u>English Romanization</u>	<u>Japanese Original</u>	<u>English Term</u>	<u>Japanese Original</u>
Maehara Senji	前原誠司	Minister of Land, Infrastructure, Transport and Tourism (up until September 17, 2010); Foreign Minister (September 17, 2010 to March 6, 2011)	国土交通大臣 (国交 大臣); 外務大臣
Sengoku Yoshito	仙谷由人	Chief Cabinet Secretary	内閣官房長官