

**A neo-Gramscian perspective on varieties of environmental governance:  
Hegemonic struggles in China's rare earth industry**

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## **Abstract**

This study aims to discuss the changing hegemonic struggles among the state, business and NGOs in the development of environmental governance of China's rare earth industry. Although rare earths are indispensable to myriad clean technologies, mining and processing rare earth ores cause heavy pollution. As the world's largest supplier, China's rare earth industry has developed at huge environmental cost. Environmental pollution in the upstream supply chains of the high-tech and new-energy industries becomes one of the most thorny issues in China's environmental governance. With the critical reviews on the varieties of capitalism approach and the neo-Gramscian governance studies, the study proposes a neo-Gramscian perspective on varieties of environmental governance, through merging a macro-level analysis of institutional diversity with a micro-level understanding of Gramscian hegemonic struggles. In line with an interpretivist stance, the study employs a qualitative case study approach to investigate the institutional variations of the state in China's varieties of governance from a planned economy to a market economy and the changing hegemonic struggles involved, with consideration of the complex historical trajectories and distinctive political economies in China. Based on the empirical evidence collected via semi-structured interviews and documentary reviews, the study carries out a critical discourse analysis to discuss a series of contested environmental issues in China's rare earth industry. Empirical findings conclude that the genres of China's varieties of governance have been transformed from highly prescriptive planning to government supervision, and the state still plays a leading role in regulating and coordinating contemporary alliance building. The study enriches the abstract VoC typologies with China's institutional diversity; extends the Gramsci framework to China's regime with particular emphasis of state power; provides a more plural and dynamic understanding of the hegemonic struggles within China's varieties of governance.

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### List of Abbreviations

BBB	Baotou Business Bureau
BEITC	Baotou Economic and Information Technology Commission
BEPB	Baotou Environmental Protection Bureau
BESI	Baotou Environmental Science Institution
BSRE	Baotou Steel Rare Earth Group
CDA	Critical discourse analysis
CME	Coordinated market economy
CPC	Communist Party of China
CSR	Corporate social responsibility
EPB	Environmental Protection Bureau
First Plan	First Five-Year Plan for the National Economy and Social Development
IMEPB	Inner Mongolia Environmental Protection Bureau
IPE	Institute of Public & Environmental Affairs
LME	Liberal market economy
MA	Ministry of Agriculture
MC	Ministry of Commerce
MEP	MEP Ministry of Environmental Protection
MIIT	Ministry of Industry and Information Technology
MLR	Ministry of Land and Resources
MPH	Ministry of Public Health
MWR	Ministry of Water Resources
NDRC	National Development and Reform Commission
NGO	Non-governmental organisation
PRC	People's Republic of China
RMB	Renminbi (Official currency of the People's Republic of China)
SDPC	State Development Planning Commission
SERC	State Economic Restructuring Commission
SETC	State Economic and Trade Commission
SME	Small-and-medium enterprise

SOE	State-owned enterprise
TVE	Township and village enterprises
UK	United Kingdom
US	United States
VoC	Varieties of Capitalism
White Book	White Book – China’s Rare Earth Conditions and Policies
WTO	World Trade Organization
1989 Regulation	Regulations on Registration and Administration of Social Organisations
1998 Amendment	1998 Amendment on Regulations on Registration and Administration of Social Organisations

## CHAPTER ONE: INTRODUCTION

### 1.1 Background

#### 1.1.1 An Introduction to China's Environmental Governance

We must be fully aware of the severity and complexity of our country's environmental situation and the importance and urgency of strengthening environmental protection. Protecting the environment is to protect the homes we live in and the foundations for the development of the nation ... China should be on high alert to fight against worsening environmental pollution and ecological deterioration in some regions, and environmental protection should be given a higher priority for the development of national modernisation.<sup>1</sup>

At the *Sixth National Environmental Protection Conference* in 2006, the former Chinese Premier Wen Jiabao made a significant speech, addressing the importance of environmental governance for further modernisation of the nation, and highlighting environmental protection as an important ingredient of the assessment system of economic and social development in China. In fact, over the past three decades, China has experienced phenomenal economic growth. Similarly to all hyper-developing countries in the world, China has also suffered from serious environmental and resource sustainability challenges as well as deterioration of its environmental self-repair capacity since the 1970s. Facing more threats from environmental degradation and a serious imbalance between economic growth and sustainable development, since the 1980s, the Chinese government has gradually shifted their focus from purely pursuing economic growth and output maximisation, to pollution control and sustainable development, so as to realise sustainable resource development and environmental protection in the pursuit of economic growth.

As a single-party regime – ‘a rule of persons’ tradition, more specifically – the historical trajectories of one-party dominance over 5,000 years has heavily shaped the development of environmental governance in China, although the top-down decision-making system has been

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<sup>1</sup> Extracted from the transcripts of the speech of the former Chinese Premier, Wen Jiabao, at the *Sixth National Environmental Protection Conference* in 2006 in Beijing, China. The full text is available at: [http://english.peopledaily.com.cn/200604/24/eng20060424\\_260577.html](http://english.peopledaily.com.cn/200604/24/eng20060424_260577.html).

widely criticised concerning the feasibility and effectiveness of green growth planning and implementation. The state plays a dominant role in environmental governance, and the environmental administrative authorities in the central government and at different levels of local governments are particularly important. For example, at the current stage, the Ministry of Environmental Protection (MEP) of the People's Republic of China (PRC) is endowed with the decision-making power in environmental governance by the central state, in alliance with the Ministry of Agriculture (MA), the Ministry of Public Health (MPH), the Ministry of Water Resources (MWR), and the Ministry of Land and Resources (MLR), as well as working together with the Ministry of Commerce (MC) responsible for formulating policies on bilateral and multilateral trade, and the National Development and Reform Commission (NDRC) responsible for broad administrative and planning control over the Chinese economy. The different levels of local governments, including provincial level, prefectural level, county level, township and village level, are responsible for implementing national policies and regulations, monitoring pollution sources, and distributing pollution discharge permits (Harashima, 2000; Lan et al., 2006). Thus, lower-level environmental authorities can more easily assess the sources of pollution, obtain detailed information about the local environment and develop the practical strategies to fight local environmental deterioration. The variations of state power in the development of China's environmental governance during the past six decades will be clearly explained in this thesis.

With increased industrialisation and urbanisation in China, the environmental influences of corporate activities make societal responses to environmental issues significant in firms. Since the 1990s, confronting the devastating effects of environmental degradation across the country, the central state has begun to require the large state-owned enterprises (SOEs) to establish internal environmental monitoring departments and designate professional staff to conduct internal environmental audits. However, at the beginning, with strong government administrative interventions in environmental governance of state-owned industries, including extractive industries, the increasing transparency of monitors on business only enriched the experience of the government regarding the control of information for environmental governance; at the corporate level, with the heritage of the primary consideration of economic imperative in China's planned economy, the internal environmental audits in large SOEs were not very transparent, and were also vulnerable to the public, which generated an 'ongoing paradox' to involve the business sector actively in governance in the environmental arena (Wang, 2005, p. 278). In recent years, reacting to the government's increased commitments and efforts to fight against industrial

pollution activities, as well as responding to civil society's increasing concerns over the adverse environmental consequences, firms have begun to focus on improvement of their environmental competitiveness (Chang and Wang, 2010; Lo and Tang, 2014), which will be expanded further and discussed in more detail.

Before the 1990s, the communication channels among the state, business, and civil society had always been ignored, and the low level of environmental awareness of the populace had made such communication useless (Harashima, 2000; Lan et al., 2006). Since the 1990s, with the gradual relaxation of state control over public discourse, and the improvements in national education, as well as the ever more open-minded approach to societal influences on environmental governance from Western ideas, the environmental awareness and receptiveness of Chinese civil society to government environmental programmes have been gradually improved (Ho and Vermeer, 2006; Lan et al., 2006), and civic environmental non-governmental organisations (NGOs) have been emerging and flourishing in China. Since the mid-1990s, civil society studies in China have emerged. However, the idea of civil society, derived from Western historical experience, seems to be problematic as a way of understanding social changes in Chinese society, which is integrated with different institutional foundations, historical trajectories and social characteristics (Saich, 2001). Civil society in China usually designates an 'informally structured network of NGOs that have a loose relation with the Party-state' (Liu, 2006, p. 54; Saich, 2006; Yu and Guo, 2012). Under the Chinese soft authoritarian political economy, as the only legitimate means to effect transformative movement of the democratisation process, NGOs have become an exclusive channel for the public to struggle for hegemonic power in China. The state, on the one hand, integrates NGOs into bargaining processes; on the other hand, it controls them strictly and bans them from acting autonomously from the government (Heberer, 2012). Grassroots green NGOs have been tightly restricted to ensure they do not challenge the established political authorities, and the 'non-oppositional stance' secures for them survival and growth, but limits their role in creating an inclusive political process in China (Tang and Zhan, 2014, p. 197). Under the strict government control, most environmental NGOs function as 'promoting China's green image, facilitating foreign assistance, conducting environmental research, mobilising popular support in the implementation of the government's green policies, and socialising green values' (Lo et al., 2001, p. 306; Lan et al., 2006; Lo and Leung, 2014). In the context of the Chinese strong state-dominated society (Frolic, 1997; Tang, 1996), the thesis provides an in-depth analysis of how Chinese civil society is gradually

becoming a ‘visible player’ in China’s environmental politics (Huang, 2013; Lan et al., 2006; Tang and Zhan, 2014; Yang, 2005).

### 1.1.2 Environmental Issues in China’s Rare Earth Industry

We are addicted to rare earths as much as we are addicted to oil. Without these elements, much of the modern economy will just plain shut down (King, 2009, p. 3).

As pointed out by Byron King, editor of *Energy & Scarcity Investors*, rare earths are indispensable to myriad intermediate and end users in ‘clean’ technology. Moving into a new era of low-carbon economy, the global demand of rare earths has been greatly driven up by the rapid development of vibrant high-tech and new-energy industries. Rare earths, including a group of 15 metallic elements plus scandium and yttrium, have a range of special electronic, magnetic, optical and catalytic properties, which can be added to a range of compounds and alloys to boost the performance of complex engineered systems that have been widely used in global high-tech industries (Mason, 2009; Pool, 2012; Saefong, 2009). Nowadays, most people are quite familiar with wind turbines, hybrid and electric vehicles, permanent magnetic motors, renewable energy mobile phones, flat screen display panels, computer monitors and hard drives, catalytic converters, compact fluorescent light bulbs and so on, but it is not widely known that all these products are dependent on the unique properties of rare earth materials.

For example, with increasingly stricter requirements on operational efficiency in high-tech industries, rare earths in permanent magnet motors can function efficiently at higher temperatures without permanent magnetisation loss, and secure the reliability, efficiency and economic viability of motors (Melfi et al., 2008). Rare earth materials not only reduce the weight of motors, but also boost the power density, which provides an effective solution to the conflict between two important input indicators: light weight and high power (Bernstein Group, 2011; Murray, 1990). More specifically, Ford Motor Co. used rare earth oxides to conserve precious metal consumption in vehicles’ catalytic converters, reducing the precious-metal cost by 40% from 2002 to 2004 (Stoll, 2004). Taking Toyota’s Prius as another example, each motor of the Prius eats up one kilogram of neodymium and each battery requires 10 to 15 kg of lanthanum. The total global sales of hybrid cars have reached 500,000 annually, which consumed rare earth materials at a prodigious rate (Conner, 2009; Gorman, 2009).

The increasing consumption of rare earths in new-energy and high-tech industries has driven up rare earth shortage in the global market (*ibid*; Bourzac, 2011). Statistics from the *Bernstein Black Book* show that, from the early 2000s, global consumption of rare earth oxides has grown at 8-12% per annum and global demand has further outweighed supply, resulting in an ongoing surge in rare earth value (Bernstein Group, 2011). The uneven geological distribution of rare earths aggravates the global shortage, concentrating their processing in a few countries, including Australia, the United States (US, California), Brazil, South Africa, Greenland and Vietnam. The mother lode of rare earths is located in Baotou in China's Inner Mongolia Autonomous Region<sup>2</sup>. China has 36% of the global deposits of rare earth oxides, and supplies more than 90% of global rare earth mineral consumption (Cooney, 2010; Nesbit, 2013; Saefong, 2009; Tabuchi, 2010).

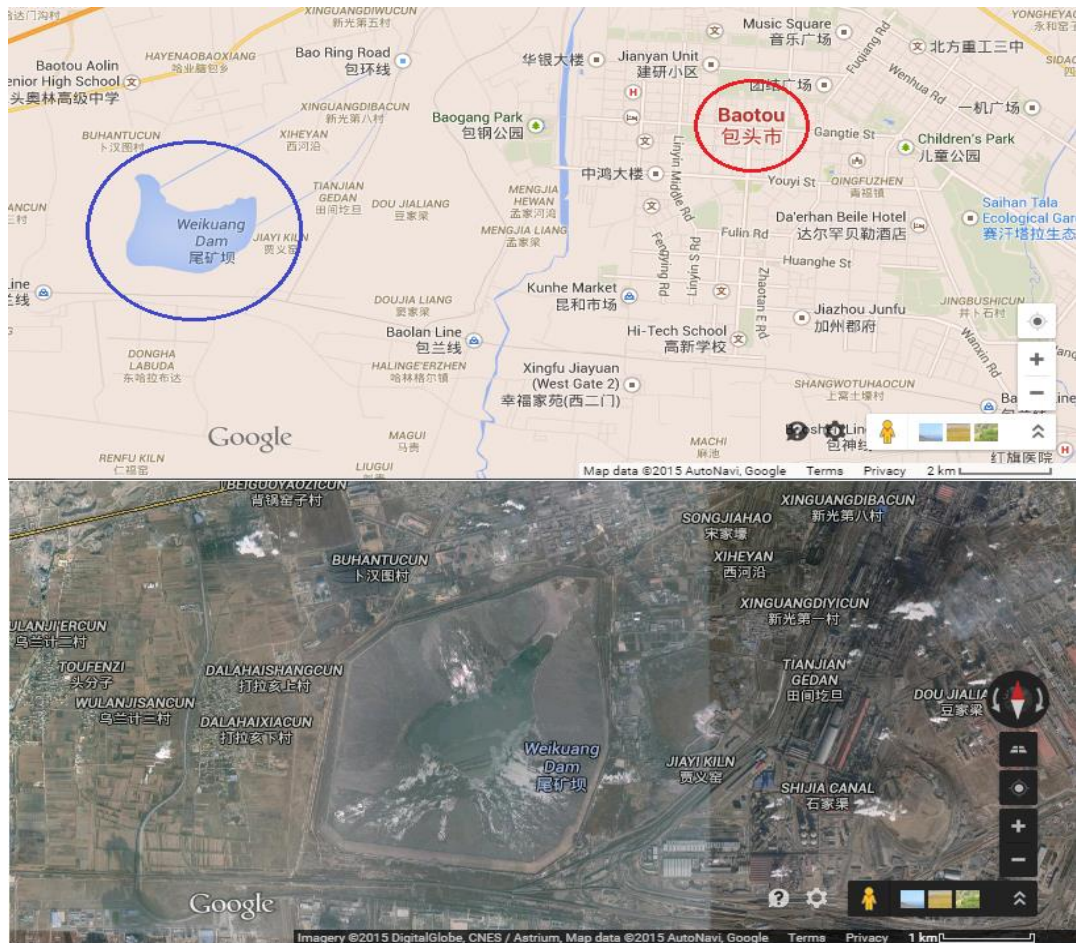
Although rare earth materials have been widely applied in many clean-energy and high-tech industries, in the upstream supply chains, the processes of mining, smelting and separating rare earth ores are heavily polluting (Bernstein Group, 2011; The State Council Information Office of the PRC, 2012). The Chinese rare earth industry, as the world's largest rare earth producer and supplier, had been operating at a lower level of rough processing for a long period, so that the huge economic profits of the rare earth industry came at the very tragic expense of the ecological environment. The recycling rates of rare earths are much lower than other metals; for example, neodymium, holmium, terbium, samarium, and dysprosium can only be recycled at rates less than 1% of the total primary metal input (Burton, 2011; Graedel et al., 2011). Moreover, they are very difficult to detect in the environment after emission (*ibid*; Rusu et al., 2006). According to the *White Book – China's Rare Earth Conditions and Policies* (short for *White Book*), the processes of smelting and separating rare earth resources generate huge quantities of 'toxic and hazardous gases and waste water with a high concentration of ammonium nitrogen and radioactive residues', which heavily pollute and poison ecological environment systems (The State Council Information Office of the PRC, 2012, p. 11).

Bayan Obo Mining District is located in the city of Baotou, China. The light rare earth deposits in Bayan Obo account for 87.1% of the total deposits in China, which has made Baotou the world's largest supplier of rare earth materials and greatly promoted local economic growth.

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<sup>2</sup> Inner Mongolia Autonomous Region, located in northern China adjacent to Mongolia, is one of the 34 provincial-level administrative areas, including: 4 municipalities; 23 provinces (including Taiwan); 5 autonomous regions; and 2 special administrative regions.

However, after the traditionally protected rare earth industry gradually opening to the domestic private enterprises since the 1980s, with higher profit temptation and lower entry barriers, Baotou's rare earth industry once attracted more than 150 small-and-medium enterprises (SMEs), engaging immoderately in rare earth mining and processing. Without enough centralised administration and government control at the beginning of the nationwide 'corporate reform' during the mid-1990s, serious mining chaos emerged in Baotou, and caused a huge waste of rare earth resources and a sharp deterioration of the local environment. Until the late 1990s, more than one hundred rare earth ore tailings dams, saturated with toxic substances, had emerged on the outskirts of Baotou. Locating one of the largest rare earth ore tailings dams on Google Maps, a big 'lake' can be found about 10 km west of the city of Baotou, known as 'Weikuang Dam', shown in *Figure 1*. From the air, the huge tailings dam looks like a big lake, but on the ground, the lake becomes a murky expanse of toxic water with no biological survival, which is heavily poisoning the local environment.



*Figure 1* One of the Rare Earth Tailings Dams in Baotou, China, positioned on Google Maps  
(Source:

<https://www.google.co.uk/maps/place/Weikuang+Dam,+Kundulun,+Baotou,+China/@40.6370636,109.6991988,14z/data=!4m2!3m1!1s0x360fe45a81d762bb:0x2f17c9cc30c9af55>).



In recent years, under the newly established national policy of ‘Scientific Outlook on Development’<sup>3</sup>, proposed by Hu Jintao’s government in 2003, realising sustainable development has become one of the most important principles for all businesses. A new era of low-carbon economy not only requires more environmentally friendly end products, but also appeals to green supply chain management at the most upstream stage. For the heavily-polluting extractive industries in China, especially the rare earth industry, responding to ever more stringent environmental requirements from the central state, and facing increasing international environmental standards after China’s accession to the World Trade Organization (WTO) in 2001, as well as reacting to the growing pressure from investors, markets, environmental NGOs and the public, environmental pollution in the upstream supply chain of many ‘clean energy’ industries becomes a rather ‘ironic’ and ‘thorny’ problem in the development of China’s environmental governance.

### **1.1.3 A Case for Studying Environmental Governance of China’s Rare Earth Industry**

It is a worldwide phenomenon that many key industries including extractive industries are either directly or indirectly controlled and monitored by the state. China’s rare earth industry has always been regarded as the key national strategic asset, and the state plays more of a key role than in other industries in its environmental governing practices. In order to investigate the exact themes of different roles of the state, business and civil society in the development of China’s environmental governance, a case study is conducted on the largest SOE in the Chinese rare earth industry: Baotou Steel Rare Earth Group (BSRE for short). Due to the special historical, political, and social roots, SOEs in China include not only corporations invested in and owned by the central state, but also those invested in and owned by local governments. BSRE is a typical local SOE, which was established in 1961 with the mission to explore the world’s largest rare earth treasure in Baotou, Bayan Obo Mining District.

The 1990s’ mining chaos in Baotou caused a series of serious environmental problems to the local ecological environment. From the early 2000s, reacting to the huge waste of rare earth

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<sup>3</sup> The ‘Scientific Outlook on Development’ was proposed in 2003 by Hu Jintao’s government, as one of the leading socio-economic development principles, incorporating the concepts of sustainable development, scientific socialism, increased democracy, humanistic society, and ultimately, the establishment of a socialist harmonious society. The full text of Hu Jintao’s report at the 18<sup>th</sup> National Congress of the Communist Party of China (CPC) is available at: <http://en.people.cn/102774/8024779.html>.

resources and the serious deterioration of the local environment, as well as responding to the dramatic growth of global rare earth demands, the central state has gradually realised the importance of rare earths as a strategic resource for China's economic development and environmental governance, and has carried out a series of consolidation plans to integrate China's rare earth industry, targeting the establishment of a strong pricing system and an integral marketing system as well as an effective environmental governance system (The State Council Information Office of the PRC, 2012). In 2001, in order to implement the geologically environmental control and restoration of the rare earth industry, and promote its green update and energy conservation, the State Economic and Trade Commission (SETC) proposed a two-year plan to consolidate the national rare earth industry, and establish the 'Northern and Southern Rare Earth Groups' to secure stronger economic and technical strengths as well as resource and energy advantages. However, this plan was finally suspended in 2003, due to unexpected governmental reorganisation and unforeseen cross-ownership problems. After 2003, under the new government's leadership, the Ministry of Industry and Information Technology (MIIT) has begun to take over the consolidation process of China's rare earth industry, targeting improvement in its pricing and competitiveness in the global market, as well as establishing an effective environmental governance system. After that, with the central state's instructions as well as the local governments' support, BSRE fully engaged in an industrial consolidation process, and finally, BSRE monopolised the whole rare earth industry in northern China. Nowadays, BSRE, with four major advantages, namely strong government support, huge resource deposit, outstanding research and development capability, and integrated industrial chain in the Chinese market, has become the largest supplier of rare earth materials in the world.

Thus, BSRE's development and integration represent the full image of the Chinese rare earth industry during the past six decades, and the changes of BSRE's involvement in environmental governance are typical to the transitions of the environmental governance of China's rare earth industry. With the strong specificities of extractive industries as national strategic assets, the changing discourses of environmental governance of the rare earth industry display the variations of the state and the distinct hegemonic struggles involved, as well as the different themes of the roles of the state, business and civil society in the development of China's environmental governance, all of which are set within a distinctive regime with 'Chinese characteristics'.

## 1.2 Aim of the Study

This research aims to investigate the changing themes of the roles of the state, business and civil society, as well as their changing power relations in the development of China's environmental governance, which evolved from a centralised planned economy (between the 1950s and the 1980s) to a market-oriented economy (from the 1990s to now) in China. Since the 1950s, the rare earth industry, as the pillar industry in Baotou, Inner Mongolia Autonomous Region, has brought a large amount of economic profits to spur local economic growth, but at the huge costs of environmental degradation and resource depletion, especially in the 1990s' mining chaos. With ever more focus from government agencies, corporations and NGOs placed on the green performance of the rare earth industry, the environmental governance practices of China's rare earth industry have become the most significant and representative cases in discussing the changing discourses of China's environmental governance. Inner Mongolia Autonomous Region is the researcher's home region, which provides the researcher with more opportunities to access the local rare earth industry. With an in-depth case study on BSRE, the thesis discusses the changing roles of three main actors in the development of environmental governance of China's rare earth industry, including different levels of government, BSRE and green NGOs, as well as their complex hegemonic struggles over the environmental issues in different periods in New China.

The development of environmental governance in China is divided into two timeline stages. The first stage is from the foundation of New China in 1949 to the early 1990s, when China had followed a Soviet-style model and experienced a long period of 'planned economy'. After the nationwide 'Socialist Transformation' in the 1950s, almost all private enterprises in China had been forced to convert to collective ownership and state ownership. For BSRE, the Inner Mongolia and Baotou local governments were the only two shareholders. In national governance, the state implemented extremely tight ideological and social control in the form of 'command', and the highly prescriptive plans from the central state determined everything in China. Commencing in 1978, the Communist Party of China (CPC) led by Deng Xiaoping began to transform the economic system towards a 'market economy', in which non-state enterprises were allowed to produce and compete with SOEs in the market. However, the legacy left by the former command economy deeply hindered the reform, which retained the supreme position of the central administrative plans in business before the early 1990s. Thus, a typical 'big-government' era had lasted more than forty years in China; and in order to achieve phenomenal

economic growth and large-scale industrialisation rapidly, an extensive growth model with fewer environmental concerns was adopted by the central state. Under such a government-led development model, first of all, the researcher tries to identify the unique politico-economic features by considering the particular historical-geographical heritages related to the unique institutional foundations. With a deep understanding of China's institutional diversity during the planned economy, the researcher tries to clarify the different roles of the main actors in the environmental governance of the rare earth industry and illustrate the distinctive power relations within such state-dominated politics.

The second stage is from Deng Xiaoping's southern visit in 1992. Deng made a profound decision to 'establish the socialist market economy', which marked the new wave of market-oriented reforms in China. Since then, in order to improve business competitiveness and information transparency, the central state has required all SOEs to accept a series of 'major surgeries' in terms of their industrial structures and specificities, administrative structures, and ownership; while private and foreign-funded enterprises have been widely allowed to compete with SOEs in the market. At the same time, a gradual relaxation of the Party's control over public discourse provides opportunities for environmental NGOs' survival and development. Although the unique Chinese historical and political trajectories of one-party dominance over 5,000 years still retain the 'big-government' overtone in contemporary environmental governance in China, the potentials of non-state actors in securing sustainable development have gradually been unlocked. Within such a unique and complex politico-economic context, this research aims to investigate the changing discourses of China's environmental governance, through evaluating how government agencies secure the hegemonic power but decentralise partial power to business and civil society; how corporations become engaged in improving environmental competitiveness; and how environmental NGOs carry out their green activities; as well as in which ways the three main actors have been involved in contemporary alliance building in the modern environmental governance system in China.

### **1.3 Developing an Approach**

#### **1.3.1 Varieties of Capitalism in China**

First of all, in order to investigate the environmental struggles within the particular empirical setting of the Chinese governance regime, it is necessary to understand the uniqueness of China's

politico-economic system, which is significantly dissimilar to both the Anglo-Saxon model in the US and the UK (United Kingdom), and the coordinated market economies in France, Germany and Japan. Post-World War II capitalism has been manifested meaningfully in different systems of economic organisation in the industrialised market economies (Hall and Soskice, 2001), which direct to different types of ‘logics of economic activities and rules of the game’ (Morgan, 2011, p. 14; Scott, 1987), and government agencies, business and NGOs also have different ways of gaining an understanding of and exerting impacts on the environmental regime (Levy and Newell, 2005; Wittneben et al., 2012).

The varieties of capitalism (VoC) approach in the ‘comparative capitalisms’ literature provides a deep insight into different logics of politics and economic activities, which can help to identify countries’ typologies, and matters for fruitful interchange among scholars who are interested in industrial relations, social policy-making, business and economics (Hall and Soskice, 2001). Thus, the researcher employs the VoC approach to model the diversity of China’s institutional formations and foundations. Based on varying politico-economic structures, many scholars propose their classifications of different regimes. For example: two models of economies (Hall and Soskice, 2001); five different regimes (Freeman, 2007; Rawls, 2001); four types of state (Whitley, 2005; 2007); and institutional diversity in four typologies (Morgan, 2009). Although many models of VoC have been proposed in the politico-economic diversity research, the Chinese VoC is rather complex, involving multiple models of VoC within the same national boundaries (McCann, 2014). On the basis of China’s unique historical and cultural trajectories and political and economic structures, the literature review and analytical chapters will carry out a more detailed analysis of China’s VoC.

Moreover, although the VoC approach can help to model China’s changing regime typologies, the approach itself has been widely criticised as less considerate of politico-economic and societal themes, historical trajectories and dynamic power relations among multiple actors (Bieling, 2014; Coates, 2014; Jessop, 2014; Weiss, 2014; Bruff and Hartmann, 2014). All of these critiques appeal for a more dynamic and sophisticated understanding of the diversity of power relations among the state, business and civil society in different regimes. With the shift from government to governance, a multiple actor-centred perspective with particular emphasis on the hegemonic struggles is needed to contextualise variations of institutional setups of post-World War II capitalisms along different lines.

### 1.3.2 From Government to Governance

The period before 1990 was a ‘big-government’ era, when people regarded state government as the leader in offering services concerning the ‘high-politics’ of waging war, making peace, diplomacy, and managing constitutional change (Evans, 2012). With the development of globalisation and internalisation across nations as well as the rapid industrialisation and urbanisation in the 1990s, a transition from the ‘high politics’ of the states to ‘low politics’ has been executed: the states have begun to administer the needs and daily affairs of their population by means of education, economic policy, public health, sanitation and so on; and the modern people have begun to internalise the governing process (Foucault, 1991). As a result, power, in the modern world, is not confined to laws and the states, but is exercised through social organisations and civil society; moreover, forms of power beyond the state often ‘sustain the state more effectively than its own institutions’ (Foucault, 1980, p. 73, 1977). Within the order of the modern world, there has been a shift of power gradually from ‘government to governance’ (Evans, 2012, p. 32).

Governance, as a ‘catch-all concept’ based on new institutionalism, emerged in the 1990s (Steurer, 2013, p. 387), refers to ‘activities backed by shared goals that may or may not derive from legal and formally prescribed responsibilities and that do not necessarily rely on police powers to overcome defiance and attain compliance’ (Rosenau, 1992, p. 4). Kooiman defines governance as the totality of governing interactions, in which ‘public as well as private actors participate, aimed at solving societal problems or creating societal opportunities; attending to the institutions as contexts for these governing interactions; and establishing a normative foundation for all those activities’ (Kooiman, 2003, p. 4). In contemporary governance, not only can the government function, but also informal and non-governmental mechanisms can work effectively (Bogason and Zolner, 2007). From a collective perspective, governance cannot be simply looked upon as a public task of the state, or a responsibility of the private sector in the market, or a duty of civil society, but as a shared set of responsibilities (Kooiman, 2003). Emerging from different historical and intellectual lineages, governance offers ‘a third way between the two poles of market and state’ (Evans, 2012, p. 4). Thus, a multiple actor-centred governance approach is needed to illustrate shifts across a number of areas, and extends the governing practices to a broader scale, in which non-state actors and stakeholders such as businesses, NGOs and the public are involved in a broader process of steering to achieve common goals.

### 1.3.3 A Neo-Gramscian Perspective on Varieties of Capitalism

With the shift from government to governance, Gramsci's hegemony, with a broader conception of power and politics, is meaningful in illustrating the particular assembly of economic, political and discursive relations that bind multiple actors in political contestations and negotiations (Levy and Newell, 2005). Thus, the neo-Gramscian framework, with the persistence of social and economic structures in building hegemonic coalitions (Levy et al., 2015), can extend the VoC approach from firm-centred to multiple actor-centred with an alignment of economic, organisational and ideological forces, and help the VoC approach to identify the diversity of political contestations and accommodations in the varieties of institutional formations through engaging the state, business and civil society in building policies and norms in alternative ways.

However, although the neo-Gramscian approach provides a valuable theoretical framework with which to analyse the changing hegemonic struggles among the state, business and civil society in China's changing regimes, most Gramscian studies are Anglo-Saxon centred with overemphasis of non-state power in the context of neo-liberalism, and the variations of state power have not received much attention. In other words, it is too simplistic for the neo-Gramscian studies to neglect or de-empower the role of the state. Even in the most neo-liberal countries, the state still matters in securing the functioning of markets, maintaining the cohesion of social organisations, and resolving the crisis of neoliberalism (Harvey, 2005; Jessop, 2008; 2010; 2013). Especially in non-market areas, such as in the process of environmental governance and climate control, state action is significant in constructing and securing the functioning of organisational structures. In the 'comparative capitalisms' literature, a number of scholars try to clarify the re-configuration of state power in variations of institutional formations along different lines (Jessop, 2014; Morgan, 2009; Whitley, 2005; 2007), so as to develop and enrich the debates on contemporary capitalist diversity.

Therefore, the researcher merges a neo-Gramscian approach with the VoC approach to provide a more plural and dynamic view on the institutional variations of the state, the power relations involved, and the struggles within the state and within the governance regime, so as to investigate and clarify the institutional diversity of China's changing governance regimes. The contemporary political economy in China is not a mirror image of that of Western countries (King and Szelényi, 2005; Morgan, 2011), which contains multiple models and tactics (McNally, 2012); and the literature thereon is also contradictory (McCann, 2014). A neo-Gramscian

perspective on China's VoC can provide a collective perspective on the dynamics of contemporary political contests in China's varieties of governance, on the basis of the particular historical and cultural trajectories of China as well as complex political and economic structures.

### **1.3.4 Varieties of Environmental Governance**

Since the 1980s, the emergence of global environmental problems has called for new methods of environmental governance across different countries. Climate change has been 'a crisis of governance ... rather than a crisis of the environment or a failure of the market' (Hulme, 2009, p. 300). With the shift from government to governance in the environmental domain, environmental issues emerged as an object of governance primarily at the global level, 'reflected by the profusion of institutions like NGOs and international bodies' (Evans, 2012, p. 211). With the acceleration of globalisation and internationalisation, the state governance system is no longer competent at regulating global business, governing scattered sources of pollution, and serving the public interest. At the same time, transnational governmental institutions are also incapable of filling the governance gaps facing NGOs' increasing criticism of multinationals' activities along their global production networks (GPNs). Thus, corporations are required to take responsibility for public issues, reacting to growing social and environmental demands (Scherer et al., 2014). As ever more serious environmental problems emerge as new threats to hegemony on a global scale, environmental activists have sought to contest the power of business in new ways and balance the power between the state and the market in the global environmental governance system (Cox, 1987, 1996; Newell, 2005).

Before the 1990s, within the traditional command-and-control model, governments had always dealt with environmental issues as isolated, small-scale technical problems that were easily fixable through specific laws and procedures (Evans, 2012). Landy and Rubin (2001) criticised the traditional centralised command-and-control model which, although it can work well when only a few point source polluters need to be regulated, easily breaks down when multiple non-point source polluters emerge. Against the nineteenth-century backdrop of rapid urbanisation and industrialisation, global environmental threats such as climate change, acid rain, desertification and biodiversity loss require new forms of state control (Evans, 2012). Confronting global environmental issues, the command-and-control model of the state was gradually replaced by a series of new environmental policy instruments, such as environmental taxes, voluntary agreements, tradable permits, eco-labels and so on. These instruments, growing enormously



since the 1970s, appeal for the participation of many non-state actors beyond governments (Jordan et al., 2003). As illustrated by Lipschutz (1996), environmental change should be thought of as a social phenomenon rather than a solely biogeophysical phenomenon, in which the roles of state and non-state actors become increasingly concerned. Compared with the government taking responsibility for governing the environment alone, governance provides a better way to bring NGOs, the public and business into the process of governing (Evans, 2012; Jordan et al., 2003; Levy and Newell, 2005; Levy et al., 2015).

In 2003, Levy and Egan conducted a research on climate change negotiation with a neo-Gramscian perspective, based on a case study of the automobile and oil industries in the US and European regions. They point out that greenhouse gases in the global climate system present ‘a threat to hegemony’ (Levy and Egan, 2003, p. 814). The climate change resulting from human emission of greenhouse gases challenges all three pillars of hegemonic stability: the state, business and civil society. The automobile industry fears that emission issues touch emotional chords which could be exploited by active environmental groups, and promote environmental organisations, regulatory agencies, and nascent companies pursuing low-emission technologies. As transnational problems, the climate change issues spur the development of international institutions to monitor business operations, and expand the organisational capacity and legitimacy of NGOs and communities of scientific experts to make international environmental assessments and negotiations. Tackling climate change, firms, governmental agencies, NGOs, and intellectuals seek to establish coalitions in new ways to build policies and norms, which push government agencies to tighten regulations for the green performance of automobiles and efficiency of power plants at the organisational level (Levy and Newell, 2005). Levy and Egan’s research provides a valuable empirical study to investigate the influence of firm-level and institutional variables on corporate political strategy within a neo-Gramscian theoretical framework, particularly contributing to institutional theory by illustrating the tensions of agency-structure relationship in the political strategy formation process, as well as the hegemonic position of business and the challenging role of civil society in climate change negotiations.

David Levy and his colleagues use a neo-Gramscian approach to extend Gramsci’s political thought of hegemony, historical bloc, war of position and civil society (Levy, 2008; Levy and Egan, 2003; Levy and Newell, 2002; Levy and Scully, 2007), and apply the neo-Gramscian approach to environmental governance, investigating how business, NGOs and state agencies ‘engage in contests over the structures and processes that constrain and order industrial activities

giving rise to environmental impacts' (Levy and Newell, 2005, pp. 48-49; Levy, 2011; Levy and Jones, 2006; Levy and Spicer, 2013; Levy et al., 2015). In order to clarify the variations of changing hegemonic struggles among the state, business and civil society over the environmental issues in China's rare earth industry, the researcher proposes a neo-Gramscian perspective on varieties of environmental governance to investigate the particular historical and politico-economic heritages of the institutional variations of the state in constructing hegemony, the institutional diversity of business and civil society in alliance building, and the unique institutional formations and foundations of their power relations in the development of China's environmental governance.

#### **1.4 Importance of the Study**

The aim of this study is to argue for a neo-Gramscian perspective on the changing hegemonic struggles in the varieties of environmental governance of China's rare earth industry in two periods, from a centralised planned economy between the 1950s and the early 1990s to a market-oriented economy. According to Scott (1987), the diversity of societal spheres directs to different belief systems and different types of social relations. Owing to the unique historical, social, political and economic trajectories, the hegemonic coalitions and bargaining processes among the state, the capital, and civil society over the environmental domain in China have distinctive features, associated with the existence of multiple models of VoC within the same national boundaries, which are completely different from the discourses of environmental governance in Western countries (Lu, 2014; McCann 2014; McNally, 2012; Morgan, 2011; Witt, 2010; Witt and Redding, 2014). Thus, to investigate the environmental contestations in China, it is necessary to understand the uniqueness of China's changing politico-economic regimes, which are significantly dissimilar to both the Anglo-Saxon model in the US and the UK, and the coordinated market economies of France, Germany and Japan (Hall and Soskice, 2001).

Therefore, first of all, based on the mainstream divisions of VoC in the 'comparative capitalisms' literature, this study employs the varieties of capitalism (VoC) approach to model the changing typologies of China's complex political economies, and identifies the institutional formations of the changing regimes of New China with its distinctive politico-economic and historical trajectories. However, although the VoC approach helps to model the unique changing typologies of China from a planned economy to a market economy, the approach itself has been widely criticised. This study summarises the major critiques of the VoC approach. In terms of

the critiques, the study proposes a neo-Gramscian perspective on varieties of governance by merging a neo-Gramscian approach with the VoC approach: on the one hand, the VoC approach, with a deep insight on varying politico-economic structures at the macro-level, extends the neo-Gramscian framework to a wider range of regimes; on the other hand, the neo-Gramscian approach, with consideration of micro-level struggles among multiple actors, provides a more dynamic and coherent understanding of the ideological, political and social dimensions of institutional foundations and formations in China.

As the environmental issues are a new crisis for hegemony, with regard to David Levy and his colleagues' research, the research proposes a neo-Gramscian perspective on China's varieties of environmental governance. However, although the neo-Gramscian approach provides a valuable theoretical framework with which to analyse the changing hegemonic struggles among the state, business and civil society in China's changing environmental governance systems, most of the existing neo-Gramscian studies on environmental governance, for example, by David Levy and others, set within the neo-liberal countries, and are overly focused on a pluralistic interpretation of Gramsci from a neoliberal perspective. In other words, from the perspective of neo-liberalism, with overemphasis of the roles of the non-state actors in outmanoeuvring their rivals giving rise to environmental impacts, most neo-Gramscian studies are usually Anglo-Saxon centred, and make few efforts to clarify the institutional variations of the state in environmental governance and to identify the reconfiguration of state power in contemporary alliance building, although they essentially imply that all three main actors have similar access to power in environmental governance. The reregulation and re-empowerment of the state in contemporary alliance building has not received much attention in the current Gramscian environmental governance research.

The thesis is more critical of the western bias of the neo-Gramscian perspective, by introducing Bob Jessop and other scholars' studies in the comparative capitalism studies, which regard that the state still matters in neoliberalism and elsewhere. In the 'comparative capitalisms' literature, there are a number of scholars trying to clarify the re-configuration of state power in variations of institutional setups of post-World War II capitalisms along different lines, so as to develop the debate on capitalist diversity (Jessop, 2014; Morgan, 2009; Whitley, 2005, 2007). Therefore, to extend the neo-Gramscian framework to China's 'soft authoritarian' regime (Johnson, 2002, p. 155), it is important to understand the institutional variations of the state in the development of China's political economies. By integrating a neo-Gramscian perspective into China's varieties of environmental governance, the institutional variations of the state and the power relations

involved in China's varieties of governance during the two periods can be better understood at both micro and macro levels, with particular consideration of the Chinese institutional diversity.

Due to the uniqueness of Chinese institutional diversity, few studies merge the neo-Gramscian approach with China's varieties of environmental governance to discuss the changing power relations among the state, business and civil society in the development of China's environmental governance. Thus, this research is important in combining macro-level analysis of institutional diversity with micro-level understanding of organisational struggles in the neo-Gramscian framework, and providing a more plural and dynamic view of varieties of environmental governance in China's rare earth industry evolving from a planned economy to a market economy. In accordance with the changing discourses of China's complex political economies, the researcher dynamically investigates how the state regulates and constructs the hegemonic coalitions among government agencies, business and civil society in the different periods, and how non-state actors are created, adapted and coordinated over time in the development of environmental governance of China's rare earth industry. Based on an in-depth case study of BSRE, the researcher conducts a valuable empirical study on China's environmental governance at an organisational level, and bridges an empirical research gap in investigating the different roles of the state, business and NGOs as well as their changing hegemonic relations in the development of China's environmental governance, which displays a completely different image from the governance discourses in neo-liberal countries.

### **1.5 Structure of the Study**

The main body of the thesis is organised into six chapters: literature review, methodology, two stages of timeline analysis, discussion, and conclusion.

The literature review chapter starts from the different mainstream typologies of VoC in the 'comparative capitalisms' literature, and points out the research gap for China's VoC model. Then in terms of the major critiques towards the VoC approach, Gramsci's hegemony, with a broader conception of power and politics to bind multiple actors in political contestations and negotiations, is regarded as meaningful in providing, in a more concrete way, a multidimensional view on variations of capitalist social formations along different lines. Since the emergence of environmental problems as a new crisis to hegemony, David Levy and his colleagues' studies, by introducing a neo-Gramscian theoretical framework to environmental governance, are mainly

referred to as providing a more dynamic and collective understanding of varieties of environmental governance. However, in most Gramscian governance studies, compared with the overemphasis of corporate political power and NGO's counter-hegemonic power in contemporary alliance building, the institutional variations of the state and the power relations involved are implicit. But they are important for analysing the hegemonic coalitions between the state, business and civil society under the Chinese state-dominated regime. Thus, the importance of a neo-Gramscian perspective on varieties of environmental governance is emphasised so as to discuss the reconfiguration of state power and the potential of non-state actors in contestations over the environmental issues under the development of China's distinctive politico-economic regime.

In the following chapter, the research philosophy, methodology and methods of data collection and analysis are illustrated. The philosophical stance of environmental governance research displays different ontological and epistemological positions to create trans-disciplinary knowledge. Based on the research philosophy, the researcher chooses interpretivism as the research paradigm and conducts a qualitative research on the chosen topic. To investigate the different roles of government agencies, corporations and NGOs as well as their power relations in the development of China's environmental governance, the researcher positions the field site on Baotou's rare earth industry, with a case study on BSRE. Primary data based on the semi-structured interviews with Baotou's local government officers, BSRE's managers and environmental NGOs' staff are collected through on-site investigation, and secondary data based on documentary collection of government documents, corporate reports, and relevant media news, are also gathered to support the empirical research.

For data analysis in the following two analytical chapters, on the basis of the two timeline stages, the research follows Fairclough's three dimensions of critical discourse analysis (CDA) – a textual analysis, a process analysis and a social analysis – to illustrate the changing discourses of environmental governance of China's rare earth industry. Based on the discursive textual elements of interview transcripts and documents, a textual analysis is carried out to describe the different roles of the state and non-state actors in the changing genres, discourses and styles of environmental governance in the Chinese rare earth industry; then there is a process analysis to interpret how different textual elements hang together to constitute the integrated discourse of environmental governance in China's rare earth industry; and finally a social analysis, from a wider perspective of political discourse, to discuss the hegemonic struggles among government

agencies, corporations and NGOs that are embattled within the institutional foundations and formations of China's varieties of environmental governance.

Based on the theoretical framework of varieties of environmental governance and the timeline analysis on the changing discourse of environmental governance of China's rare earth industry, the discussion chapter identifies the theoretical contributions and the empirical contributions of the study, as well as how the empirical findings link to the theories and are consistent with the theoretical framework. With a neo-Gramscian perspective on China's varieties of governance, the history of China's varieties of environmental governance is interpreted at an organisational level, particularly emphasising the institutional variations of the state and the power relations between the state, business and civil society that have evolved within the Chinese governance regime.

The final chapter summarises the conclusion of the research, including the empirical findings and contributions, and points out certain limitations of the research as well as suggested areas for further research. Concluding remarks appeal for multiple actors worldwide including multinational corporations, international NGOs and intergovernmental organisations to place more attention to the environmental performance of the global rare earth industry, facing the new round of the vibrant global demand for rare earth materials in high-tech and new-energy industries.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

In order to identify China's institutional diversity and provide a more plural and dynamic understanding of the changing hegemonic struggles in the environmental governance of China's rare earth industry, this chapter reviews the VoC studies in the 'comparative capitalisms' literature and the neo-Gramscian studies on environmental governance. Section 2.2 starts from a series of main typology divisions of VoC, and then points out gaps in the VoC model in terms of describing the unique Chinese politico-economic regime, and finally provides a critical view of the VoC approach in comparative capitalism studies. Towards the critiques of VoC, with environmental issues being a new crisis of governance, Section 2.3 introduces the neo-Gramscian framework to understand the varieties of dynamics of hegemonic struggles between the state and non-state actors in institutional formations of environmental governance along different lines. With the critical reviews on the neo-Gramscian studies on environmental governance, the researcher proposes a neo-Gramscian perspective on varieties of environmental governance in Section 2.4, to clarify China's institutional diversity and investigate the dynamics of environmental struggles in China's rare earth industry at both the macro level of institutional variations of the state and the micro level of power relations involved therein.

### **2.2 Varieties of Capitalism**

#### **2.2.1 Different Forms of Capitalism**

Countries have different logics of economic activity and rules of the game (Morgan, 2011, p. 14).

Post-World War II capitalism has been manifested meaningfully in different systems of industrialised market economies. With the deepening of globalisation and internationalisation, political differences do not seem to be reduced, and a wide variety of ways of organising market economies still exist. To identify these differences, the varieties of capitalism (VoC) approach has been widely used to provide a deep insight into different logics of politics and economic activities, and matters for fruitful interchange among scholars who are interested in industrial relations, social policy-making, and economic organisations in the current studies of political

economy (Hall and Soskice, 2001). Although the VoC approach defines a politico-economic system as a ‘terrain populated by multiple actors’ (*ibid*, p. 6), firms are still regarded as the crucial agents of adjustment in the face of international competition and technological innovation in capitalist economies.

According to the rational ways through which firms are involved in strategic interaction with governments and individuals and influence the overall levels of economic performance, Hall and Soskice identify two types of VoC: liberal market economies (LMEs) and coordinated market economies (CMEs). In LMEs, the demand and supply conditions in competitive markets always play the key role in balancing corporate behaviour; while in CMEs, the equilibrium outcomes of corporate behaviour are more often achieved via strategic interaction between firms and other actors. Economic activities in certain nations such as Germany, France and Japan, are coordinated with other non-market actors to construct their core competencies, which are greatly different from those in the US and the UK, where companies coordinate their activities mainly based on ‘hierarchies and competitive market arrangement’ (*ibid*, p. 8). It is more distinct for China, with ‘whatever forms of market economy’, differentiating significantly from those institutionalised in both CMEs and LMEs (Whitley, 2007, p. 3).

In short, varieties of politico-economic systems, based on respectively historical, cultural and social trajectories, contain varying power relations between the state, business and civil society. Multiple actors in VoC have different ways of gaining a partial understanding of and exerting influences over their respectively political and social systems (Hall and Soskice, 2001; Jessop, 2014; Levy and Newell, 2005; Morgan, 2009; Scott, 1986). According to various forms of post-World War II capitalism, many scholars propose their classification of different regimes in the ‘comparative capitalisms’ literature, and group countries’ typologies based on their common aspects of institutional foundations and formations (*ibid*; Morgan, 2011; Rawls, 2001; Whitley, 2007).

### **2.2.2 Whitley’s Varieties of Capitalism**

Based on the institutional variations of the state, Whitley (2005) points out that at least four types of state with complementary institutions to constitute particular institutional regimes can be identified, which differ greatly in how the state organises economic activities, develops economic actors, and standardises economic systems across regions and sectors. The four ideal



types of state are identified based on two essential principles: the extent to which the states are involved in directing economic development, especially in constructing particular organisational capabilities; and the extent to which the states are involved in steering independent intermediary associations to represent the interests of varied groups in the processes of policy development and implementation. In *arm's length states*, the state tries to build more transparent capital markets, economic actors are equal and free to engage in business activities, and funds are priced and allocated via market processes. In *dominant developmental states*, the state is suspicious of independent firms, unions and other groups competing with government authorities in economic policy making, so that the state takes active approaches to control union organisation, and independent interest groups usually function as agents of the state. For the other two more collaborative promotional states, *business corporatist states* and *inclusive corporatist states*, both support individual groups with greater autonomy through delegating powers and resources and granting monopolies in dealing with state agencies, but differ in their recognition and involvement of labour union federations in economic policy formulation and implementation. *Business corporatist states* attempt to cooperate with large firms but rarely encourage labour unions' intervention in policy development; by contrast, in the context of *inclusive corporatist states*, social partners are encouraged to engage in distribution issues and income policy making (Whitley, 2007, pp. 39-44). In Whitley's division of VoC, the state is regarded as the most important political force to institutionalise political and legal systems and constitute economic actors within national boundaries.

To examine the influence of globalisation, particularly for the impact of transnational business on VoC, Morgan (2009) develops the details of Whitley's national business systems approach, and investigates how VoC may evolve with the influence of multinational activities and globalisation. First of all, in *liberal market economies*, regulatory states do not intervene in business activities except when developing economic rules to secure efficient market operation; markets, based on transparent regulations, are open for multinationals' entry and fair for competition, and firms are equal and free to carry out business activities; thus, institutional diversity is quite open at the corporation, sectorial and regional levels, and reinforced to become more diverse by the MNCs' entry from different institutional systems. Second, within *inclusive corporatist contexts*, states are engaged in coordinating systems with independent intermediary associations; markets for financial and professional services are open to outsiders' entry, and conventional markets for manufactured products tend to be dominated by insider incumbents; thus, there is relatively weak but increasing institutional diversity with the growth of multinationals in the financial sector.

Third, *business corporatist forms* evolve governments and large firms together in supportive networks; large firms develop their own labour management standards, while small firms are usually subject to their power; markets are open for outsiders' entry, but restricted by insiders so that only insiders are able to access markets of the final products; thus, institutional diversity exists within a particular pattern of power of large firms, and multinationals' potential for influence is weak. Finally, *developmental states* tend to sponsor particular individuals and forms to create world-class corporations; a small number of large firms with governmental support can intervene in policy-making, and other firms are subject to their power; states welcome multinationals' entry to upgrade national industry and access global markets, although resistance from large firms could undermine their attempts. As a result, institutional diversity is constrained by the power of states and large firms, and multinationals have the potential to affect the diversity through successful entry (Morgan, 2009, pp. 588-601). In Morgan's division of VoC, the influence of corporate political power on different structures of diversity is highly emphasised in maintaining relationships between key social factors.

### **2.2.3 Rawls' Varieties of Capitalism**

Based on diversity of social systems, Rawls (2001, p. 136) categorises five typologies of VoC, in accordance with their respective political, economic, and social institutions, including: *laissez-faire capitalism*; *welfare-state capitalism*; *state socialism with a command economy*; *property-owning democracy*; and *liberal (democratic) socialism*. Their unique regimes determine the effectiveness of their political society in achieving the aims of the public. *Laissez-faire capitalism*, with the separation of state and economy, concerns formal equality but 'rejects the fair value of political liberties and the fair equality of opportunity'; *welfare-state capitalism* suggests a welfare state covering the basic social needs and allows a small part of society with a near monopoly over the means of production, thus securing equality of opportunity to a certain extent but still rejecting the fair value of political liberties; *state socialism*, under a command economic system controlled by one party, rejects 'the equal basic rights and liberties, not to mention the fair value of liberties' as well as the equality of opportunity; *property-owning democracy*, with the aim of realising the idea of society as a fair system of cooperation and dispersing the ownership of wealth and capital to prevent a small class from controlling the economy and even political life, secures the fair value of liberties and the fair equality of opportunity; and finally, *liberal socialism* also secures the basic liberties, under which the economic structure is 'owned by society', political power is 'shared among democratic parties',

and economic power is ‘dispersed among corporations’, allowing them to carry out their business activities freely within competitive markets.

Freeman rebuilds Rawls’ five kinds of regime, and develops a continuum of VoC, based on diversity of political constitutions, legal systems, economic systems, property systems, and mechanisms of the family. Freeman’s divisions start from *laissez-faire capitalism*, in which property is privately owned and unregulated market exchange, gambling, bequest or some other free choices determine all economic activities; to *classical liberalism* in which the liberty of individuals is secured through limiting the power of the state; then to a variety of mixed economies, including *liberal equality*, *welfare-state capitalism*, *property-owning democracy*, and *market socialism*; all the way to Soviet-style *command economy communism* in which the central plans determine all allocations and distributions (Freeman, 2007, p. 205).

Mäkinen and Kourula (2012, pp. 652-654) introduce the Rawlsian conception of division of moral labour to illustrate the pluralism of corporate political roles within six varying politico-economic structures, including *libertarian laissez-faire*, in which minimal state and coercive structures are addressed in business, strong firms take over traditional state roles, and citizenship is regarded as a private contractual relationship; *classical liberalism*, in which the state aims to provide public goods efficiently, firms mainly focus on economic tasks, and citizens are treated as free economic actors with political responsibilities; *liberty equality*, in which the state aims to secure equal opportunity, firms with excessive economic powers are considered to ‘spill over to other spheres of society and corrupt them’, and citizens are regarded as free and political participants of society; *welfare-state capitalism*, in which the state aims to secure general welfare through a fair social sector and redistributive economic institutions, firms are incapable of processing the public task of general welfare but have some space for political tasks due to public failures and information asymmetries, and citizens are considered as having civil and political rights and moderate economic means as well as political, social and economic responsibilities; *property-owning democracy*, in which the state aims to maintain democratic social life and the economic system, firms have freedoms with which to operate their business activities, but are prevented from elite control of economy and politics; and *market socialism*, in which the objective of the state is to maintain strict equality and socialise the means of production, and firms owned by workers rent public means of production for efficient use and take major political roles for equal distribution. Rather than the firm-centred perspective in Hall and Soskice’s division or the state-centred perspective in Whitley’s division, Mäkinen and

Kourula use the VoC approach as a multiple actor-centred perspective to investigate the diversity of the roles of the state, firms, and citizens, as well as the relationship between business and the state within different structures of society, based on the political, social and economic dimensions, which provides an innovative and multidimensional perspective for comparative capitalism studies.

In short, on the basis of the different models of VoC in politico-economic diversity research, which are mentioned in Section 2.2.1, Section 2.2.2 and Section 2.2.3, the researcher moves the focus to the unique Chinese politico-economic regime. Although many models of VoC have been proposed in comparative capitalist studies, the Chinese VoC is rather complex, involving multiple tactics and models within the same national boundaries, which is distinct and significantly dissimilar to both the Anglo-Saxon model and coordinated market economies (McCann, 2014). Morgan (2011, p. 21) points out that China provides ‘an interesting counterpoint to the institutional upheavals of Europe’. Thus, to identify which model or multiple models of VoC fit China’s changing politico-economic regimes, a deep insight into China’s unique institutional formations and foundations is required, with consideration of China’s economic, political and historical trajectories.

#### **2.2.4 Gap for China’s Varieties of Capitalism Model**

China is not a ‘mirror image’ of the West, and thus an independent analysis of the Chinese politico-economic system should be rooted in China’s unique historical and political experience (Hamilton, 2006; McNally, 2012). From a historical perspective, according to McCann (2014), China has been engaged in an unfinished project which continues to evolve, so that it is difficult for a single classical VoC model to accurately pinpoint the dramatic changes in China’s politico-economic structures.

Regarding the four types of VoC delineated by Whitley (2007) and Morgan (2009), *liberal market economies* in which the states have limited roles in free markets, and *inclusive corporatist contexts* in which the states cooperate closely with social partners in constructing economic systems, are clearly not suitable for China’s regime. Due to the suspicions of private firms, unions and other independent groups challenging state authority, the state nationalised all means of production after the foundation of New China, and then gradually opened to private and international enterprises after the Reform and Opening-up policy of 1978, which exhibits

certain similarities to the typology of *the developmental state*, in which strong central government directs and sponsors large businesses and discourages intermediary associations for both firms and labour.

However, at the current stage, China ‘is moving in the direction of a capitalist economy, but has not yet achieved it’ (King and Szelényi, 2005, p. 222). Regarding China’s capitalist transition, according to McNally (2012), there exists a ‘unique duality’ within the Chinese political economy: the state maintains control over the commanding heights of China’s economic structure via large SOEs, while most retail and manufacturing sectors are populated by private- or hybrid-owned corporations. In the process of seeking strong social support, the state still acts as the ‘dominant and overarching force leading China’, and secures a soft authoritarian system, so that ‘any organised political opposition is resolutely crushed’ (*ibid*, p. 184). With the emergence of new market-oriented legitimacy, the private sector has been gradually embedded politically in the party-state’s political advisory and legislative bodies, especially in terms of their power of negotiating with local governments. Thus, the current Chinese regime contains considerable divergences and great uniqueness in its politics, and its unique historical-geographical heritage leads to a further layer of variation, which does not fully fit in Whitley’s *the developmental state*.

In the categories of Rawlsian typologies, there is also no single regime appropriate for analysing the dynamic politico-economic system in China. The three kinds of liberties with different levels of requirements of free markets and business power, including *laissez-faire capitalism*, *classical liberalism* and *liberal equality*, are clearly not suitable for China’s state-dominated system, in which a soft totalitarian state exerts control over the national economy, and there is no clear dominance of private property (King and Szelényi, 2005; McCann, 2014; McNally, 2012). For the period of China’s planned economy, *state socialism with a command economy* or *Soviet-style command economy communism* can be used to depict the logics of politics and economic activities in China. However, during the past three decades, China has gradually transformed its traditional government-led development model, to the market-oriented system of resource allocation, encouraging private SMEs and international corporations to compete with large SOEs in the Chinese market (McNally, 2012). Nowadays, for the key industries closely related to the national economy, there is less institutional diversity to a particular pattern of power in large firms; while in other retail and manufacturing industries, the markets are more open to private and hybrid ownership enterprises. With the deepening of market-oriented reform, due to the

‘unique duality’ of economic structure and the soft authoritarian politics, any other single Rawlsian typology such as *welfare-state capitalism*, *property-owning democracy* and *market socialism* also do not fit appropriately into China’s unique discourse.

By introducing a comparative capitalism approach to institutional diversity, Morgan (2011, p. 21) suggests that the particularity of gradual institutional changes in China involve ‘a triangulation’ between aspects of tradition, state socialism and foreign involvement. From a historical perspective, China’s politico-economic reform has been engaged in an unfinished project which continues to evolve, from the foundation of New China, to China’s dramatic attempts to break out of backwardness by following a Soviet-style developing model, then to China’s gradual opening-up and economic reforms to detach itself from the Soviet model and establish the modern enterprise system, and eventually to the current market-oriented economy with ‘distinctly Chinese characteristics’ (Fan et al., 2011, p. 1; Harvey, 2005, p. 151), as a combination of ‘market autonomy and techoscientific administrative regulation’ (Lo and NG, 2009; Sigley, 2006, p. 495). From the perspective of institutional diversity, China’s current market-oriented economy can be considered as ‘a combination of many models and systems’, and a mixed economy consisting of state actors such as SOEs, semi-state actors such as collectives and township and village enterprises (TVEs), and private actors (McCann, 2014, p. 295).

With the growth of private capital accumulation and the development of an internationalised economy in China, McNally (2012, p. 176) points out that China’s VoC seems to fit a ‘state coordinated economy’, but McNally also clearly points out that any conceptualisation of China’s emergent capitalism needs to be combined with its unique duality of institutional arrangement. Therefore, to examine which model or multiple models of VoC are more suitable for discussing the changing political economies in China, a deep insight into China’s particular historical-geographical heritage vis-à-vis its unique institutional formations and foundations is required, with a deep understanding of the hegemonic struggles in the Chinese historical, political, economic and social trajectories.

### **2.2.5 A Critique of Varieties of Capitalism**

Although the VoC approach provides a deep insight into the diversity of politico-economic regimes, the approach itself has been widely criticised as: not sufficiently considering politico-

economic and societal themes as well as power relations, conflicts and contradictions (Bieling, 2014); lacking the historical depth and comparative breadth to explain the crisis-prone capital relation (Jessop, 2014); separating institutions from their historical context (Weiss, 2014); ignoring dynamic contradictions and complex institutional variations (Coates, 2014); failing to provide a satisfactory theoretical understanding of capitalist societies (Bruff and Hartmann, 2014; Gallas, 2014), and failing to engage various actors in a holistic manner due to its absence of class tension and exploitation in contemporary varieties of capitalist relations (Bailey and Shibata, 2014; Bruff and Ebenau, 2014).

As a deficient politico-economic framework, VoC is only able to explain power relations between multiple actors in capitalist accumulation and regulation to a limited extent. With a firm-centred perspective, the VoC approach only seeks to explore the development potential of economic activities in specific institutional arrangements, and defines politico-economic change as a simple product of managerial investment, innovation and other modernisation concepts, rather than a combination of a series of institutional changes with dynamic political and social conflicts in a more sophisticated and dynamic manner (Bieling, 2014). All of these critiques, in terms of lacking micro-level consideration of the societal contradictions inherent in given power relations among multiple institutional actors in VoC, appeal for a more dynamic and sophisticated understanding of the diversity of political contestations and accommodations in varieties of institutional formation with historical depth and comparative breadth.

Bieling (2014) employs the neo-Gramscian political economy approach to enrich the 'lean' societal theory and politico-economic theory in VoC, and explores the dynamics and differences between different institutional settings. Gramsci's politics, with the conceptions of 'hegemony', 'historical bloc', and 'civil society', and the persistence of social and economic structures in building hegemonic coalitions, emphasise dynamic power and struggle of multiple actors. Thus, the neo-Gramscian framework, connoting an alliance among states, business and civil society and an alignment of economic, organisational and ideological forces (Levy and Newell, 2002; 2005), can help to contextualise variations of institutional setups of post-World War II capitalism along different lines.

## 2.3 A Neo-Gramscian Approach to Environmental Governance

### 2.3.1 Gramsci's Hegemony in Governance

The term of *hegemony*, with a long prior history, as 'one of the most significant political slogans during the Russian Social-Democratic movement from the late 1890s to 1917' (Anderson, 1976, p. 15), refers to 'the role of the working class as a leading force in the fight for democracy' (Hoffman, 1984, p. 52). However, hegemony had not been seen as an explicit concept in Marxist social theory before Gramsci (Adamson, 1980; Buci-Glucksmann, 1980; Fontana, 1993; Thomas, 2010). The illustrations of hegemony in Gramsci's *Prison Notebooks* introduce new ideas to the traditional Marxist perspectives of hegemony. 'A sense of intellectual and moral direction' was particularly injected into Gramsci's notion of hegemony (Mouffe, 1979, p. 181). In terms of the state, compared with traditional Marxism, Gramsci addresses the importance of the ideological superstructure overriding the economic structures, as well as civil society with a consent function prevailing over political society with a violence function.

For Gramsci, the real power of a ruling system does not lie in the coercive power of the ruling class, but in civil society's acceptance of the ruling class' worldview (Carnoy, 1984). Based on a direct assault on the state, a war of position, in Gramsci, aims to achieve hegemony for the proletariat in civil society before the state power captured by the Communist Party. Gramsci describes how modern capitalist societies are organised in the past and present, and extends the concept of hegemony from the proletariat to the bourgeoisie as a feature of class rule in general (Anderson, 1976; Buci-Glucksmann, 1980; Carnoy, 1984; Hoffman, 1984; Simon, 1982). As an alternative to classical Marxism, Gramsci considers hegemony as the 'essential ingredient of modern Marxism' (Hoffman, 1984, p. 55). As pointed out by Gramsci, hegemony entails:

... not only a unison of economic and political aims, but also intellectual and moral unity. ... [T]he development and expansion of the dominant group are conceived of, and presented, as being the motor force of a universal expansion. ... [I]n other words, the dominant group is coordinated concretely with the general interests of the subordinate groups (Gramsci, 1971, p. 181).

According to Hoffman (1984, p. 55), Gramsci regards hegemony as 'a fundamental axiom of political science and hence relevant to all forms of political rule'. Adamson (1980, pp. 170-171)



points out that hegemony in Gramsci has two related definitions: in the first sense, hegemony connotes ‘the consensual basis of an existing political system within civil society’, in which only the weak states secure their domination via the force or threat, while the strong states secure their domination almost exclusively via hegemony; in another sense, hegemony means ‘an overcoming of the economic-corporative’ to a particular historical stage within a given political moment. Ives (2004, p. 71) also illustrates two broad themes in Gramsci’s hegemony. Firstly, the definition of politics expands from government activities to ‘questions of how people understand the world’. Gramsci’s hegemony, with philosophical and epistemological elements, illustrates how personal aspects of daily life become significant political parts of power operations. Secondly, Gramsci’s hegemony entails ‘institutional and social analysis of various classes and organisations in society’, from the operations of state power, to the activities of civil society and institutions such as schools, newspapers, entertainment enterprises, book publishers, churches, and so on.

Between the economic structure and the state, with its legislation and coercion, stands civil society (Gramsci, 1971, p. 208).

In this argument, the term ‘economic structure’ means the dominant mode of production in a given territory at a particular moment, which consists of the ‘technical means of production’ and the ‘social relations of production’; the ‘state’ connotes the means of violence in a given territory with ‘state-funded bureaucracies’; and the term ‘civil society’ refers to ‘the other organisations in a social formation that are relatively long-lasting institutions supported and run by people outside of the other two major spheres’ (Bocock, 1986, p. 34). Therefore, Gramsci enlarges the ‘social base of the state’ and the complex relations between the ruling class and its mass base, and characterises the state as ‘hegemony protected by the armour of coercion’ (Gramsci, 1971, p. 263). The state in Gramsci involves:

not only the apparatus of government, but also the private apparatus of hegemony or civil society. ... [T]he fact is that hegemony over its historical development belongs to private forces, to civil society – which is state too, indeed is the state itself (Gramsci, 1971, p. 261).

As conceptualised by Gramsci, the integral state not only involves the ‘means of coercion’ such as police force and army, but also the ‘means of establishing hegemonic leadership in civil

society' (*ibid*). According to Mouffe (1979), Gramsci's great originality lies in his conceptually unifying two oppositional couples in Marx by building a link between 'politics – class – state' and 'people – nation – state' (*ibid*, p. 9), and the 'integral state' in Gramsci signifies the 'incorporation of the apparatuses of hegemony, of civil society, to the state' (*ibid*, p. 182). In other words, the state and civil society are integrated into a larger 'suzerain unity' (Anderson, 1976, p. 33); and the state is conceptualised as a combination of political society and civil society, rather than as the equivalent of political control (Adamson, 1980). Civil society and political society in Gramsci's framework are viewed as 'two major superstructure levels':

What we can do, for the moment, is to fix two major superstructural 'levels': the one that can be called 'civil society', that is the ensemble of organisms commonly called 'private', and that of 'political society' or the 'state'. These two levels correspond on the one hand to the function of 'hegemony' which the dominant group exercises throughout society and on the other hand to that of 'direct domination' or command exercised through the state and 'juridical' government (Gramsci, 1971, p. 13).

Civil society cannot be separated from political society in the theory of superstructures, and the state in its integral sense involves 'dictatorship plus hegemony' (Texier, 1979, p. 49). Gramsci's notions of the levels of authority and hegemony, force and consent, the individual and the universal moment, violence and civilisation, tactic and strategy, agitation and propaganda, and so on, all share a broad view of politics and the state with those in Marx and Lenin (Hoffman, 1984), but seek 'a new and fundamental dimension' to discuss the two levels – the problem of coercion and consent (Mouffe, 1979, p. 181). As concluded by Murphy (1998), Gramsci's notion of civil society, as a site of the consolidation of power, is meaningful in twentieth-century states.

In the 1980s, based on the thoughts of Gramsci, a crucial break, related to the neo-Gramscian perspective emerged, developed in the work of Robert Cox from mainstream international relation approaches to hegemony (Bieler and Morton, 2004). By rethinking Gramsci's conceptions of civil society, hegemony and historic bloc, Cox questions the prevailing order of the world in his two papers published respectively in 1981 and 1983. Cox broadens the domain of hegemony from a neo-Gramscian perspective and regards hegemony as 'a fit between power, ideas and institutions [that] makes it possible to deal with some of the problems in the theory of state dominance as the necessary condition for a stable international order' (Cox, 1981, p. 145).

As illustrated by Bieler and Morton (2004), hegemony in Cox operates in two ways: by establishing a historical bloc and social cohesion within a state; and by extending a production model transnationally and projecting hegemony via world order. Moving beyond ‘static sense of history’, Cox highlights an international historical bloc, involving governmental agencies, professionals from academia and NGOs, as well as managerial elites from international corporations (Levy and Newell, 2005; Murphy, 1998).

Gramsci’s historical bloc suggests a specific alignment of economic, ideological, and organisational forces as the conditions for field stabilisation, which reveals ‘the strengths and weaknesses of adversaries and potential allies, points of leverage, and the likely impact of each move and counter-move’ (Levy and Egan, 2003, p. 813). Gramsci’s interpretation of ‘war of position’, by means of a military metaphor, suggests how actors coordinate power sources and build hegemonic coalitions. The war of position, as a long-term struggle (Levy et al., 2015), is coordinated across multiple actors, to gain influence over civil society, develop organisational capacity, and obtain new allies (Levy and Egan, 2003). Within a neo-Gramscian approach, field-level politics, as a ‘war of position’ to establish hegemony, can be viewed as a process of assembling and stabilising a historical bloc. A long-running debate on governments as political actors and business firms as economic actors as well as civil society as being ruled in the literature was ended by neo-Gramscian theory.

With the transition from government to governance, post-Marxists Ernesto Laclau and Chantal Mouffe employed discourse analysis to re-conceptualise Gramsci’s notion of hegemony in their book *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*, and pushed forward the neo-Gramscian discourse theory to a new level. Laclau and Mouffe (2001) direct attention to new interpretations of hegemony, intellectual and moral leadership, war of position, historical bloc, and collective will and develop a post-Marxist analysis of hegemony. Hegemony, being politically constructed and inherently unstable, signifies a form of social relation, in which ‘a particular social force assumes the representation of a totality that is radically incommensurable with it’ (*ibid*, p. x). Laclau and Mouffe’s analysis suggests that the fundamental hegemonic struggles among different classes are principally on the ideological terrain, where ‘new political subjects are forged’ (Boucher, 2008, p. 89).

Taking up their ideas, a number of scholars highlight the hegemonic discourse of international business and international organisations in global governance, such as the resistance movements

to international business (Spicer and Böhm, 2007; Böhm et al., 2008); the contestations in global production networks (Levy, 2005, 2008); and the new political role of international business (Scherer and Palazzo, 2011; Scherer et al., 2014). Gramscian hegemony is important in illustrating the particular assembly of political, economic and discursive struggles in governance. According to Stoker (1998, p. 17), ‘the outputs of governance are not therefore different from those of government; it is rather a matter of difference in process’. This process incorporates the public, NGOs and corporations into governing, and the states have been gradually converted to ‘transmission belts and filtering devices for the imposition of the transnational agenda’ (Robinson, 1996, p. 19). Gramsci’s political theory ‘recognises the centrality of organisations and strategy, directs attention to the organisational, economic, and ideological pillars of power, and illuminates the processes of coalition building, conflict, and accommodation that drive social change’ (Levy and Egan, 2003, p. 803), thus generating a ‘bottom-up understanding of the world economy and state system’ (Levy and Newell, 2005, p. 52).

### **2.3.2 Environmental Problems as a New Threat to Hegemony**

Since the 1980s, the emergence of global environmental problems including global warming, climate change, acid rain, atmospheric pollution, depletion of the ozone layer and so on, has called for a new way of environmental governance across different countries. Evans (2012, p. 1) points out that environmental issues at the current stage can be viewed as ‘a crisis of governance, or a failure to organise our societies and economies in such a way that they do not harm the environment’. Since climate change is a new threat to hegemony in governance, environmental governance has been a profound political process, in which state agencies, business, and NGOs ‘engage in contests over the structures and processes that constrain and order industrial activities giving rise to environmental impacts’ (Levy and Newell, 2005. pp. 48-49). Gramsci’s hegemony is meaningful in discussing long-term and multi-dimensional interactions between state and non-state actors in constructing hegemonic stability in environmental governance (*ibid*; Levy et al., 2015).

The period prior to 1990 was an era of ‘big government’, during which the states were expected to lead the public affairs (Evans, 2012). DiMaggio and Powell (1983) view the nation-state as the primary shaper of institutional formation to create bureaucratic arrangement and centralise discretion at the top of the structure during the second half of the twentieth century. Shifting from government to governance in international business and global environmental governance

after the 1990s, the requirement of coordinating collective action brings firms and NGOs into the process of governing. The increasing focus on the political economy of environmental governance appeal for closer interaction between politics and economics. According to Harashima (2000, p. 293), the main emphasis of environmental governance concerns ‘interactions among formal and informal institutions and actors within society that influence how environmental problems are identified and framed’. Levy and Newell define ‘environmental governance’ as:

[T]he multiple channels through which human impacts on the natural environment are ordered and regulated. It not only implies rule creation, institution-building and monitoring and enforcement, but also refers to a soft infrastructure of norms, expectations, and social understandings of acceptable behaviour towards the environment, in processes that engage the participation of a broad range of stakeholders (Levy and Newell, 2005, p. 2).

Informed by Gramsci’s hegemony among the state, the capital, and social forces, David Levy and his colleagues introduce a neo-Gramscian framework to extend Gramsci’s thinking beyond the national class conflict to understand the nature of business power in international environmental governance, and investigate how different actors can engage in the climate change issues and influence complex social and political systems (Levy, 2005, 2008; Levy and Egan, 2003; Levy and Newell, 2002, 2005; Levy and Spicer, 2013; Levy et al., 2015). Gramsci’s hegemony provides a conceptual linkage among a variety of actors engaged in political struggle over complex social and political systems. Actors including government agencies, firms and NGOs seek to establish modern legitimacy and coalitions in alternative ways to build policies and norms in international environmental assessments and negotiations. The neo-Gramscian understanding of hegemony, defined by Klimecki and Willmott (2011, pp. 130-131), connotes ‘a social-political situation’, which comprises ‘intricate, contradictory, and contingent alliances of forces within the spheres of the state and the economy as well as civil society’. In the processes of alliance building and legitimacy establishing, from a neo-Gramscian perspective, the nature of corporate power and the influence of civil society are linked together with the politics of the states in environmental governance.

Environmental governance, in the new era of green economy, signifies the ‘broad range of political, economic, and social structures and processes that shape and constrain actors’

behaviour towards the environment' (Levy and Newell, 2005, p. 2). The neo-Gramscian approach not only emphasises the political nature of corporate strategies in the face of environmental challenges, but also addresses the developments of civil society in the process of environmental governing. In a broader sense, corporate technological innovation, partnership with NGOs, and private standard development can be seen as political elements to defend their hegemonic position among a network of actors in environmental governance (Levy and Egan, 2003; Levy and Newell, 2002, 2005). The neo-Gramscian theoretical framework, as a theoretically grounded frame with a valuable lens to reflect 'material, discursive, and organisational dimensions of power' within complex social systems (Levy and Egan, 2003, p. 824), therefore connotes a new way to understand the discourse of China's environmental governance. More specifically, the neo-Gramscian approach, with a strategic conception of hegemony among the state, business and civil society, provides a dynamic understanding of the changing roles of the state, business, and civil society as well as their delicate relationship changes in the development of environmental governance in China.

### **2.3.3 Non-State Actors in Environmental Governance**

#### **2.3.3.1 Business**

Gramsci's conception of hegemony provides a basis for a more critical approach to corporate political strategy that emphasises the interaction of material and discursive practices, structures, and strategies in sustaining corporate dominance and legitimacy in the face of environmental challenges (Levy and Newell, 2005, p. 58).

Nowadays, with a shift from government to governance, states and international governmental organisations seem to be incapable of regulating global business and filling the governance gap; in the meantime, NGOs criticise the corporate activities along their global production networks (GPNs) on more occasions via varied channels; thus, the international businesses, confronting increasing social and environmental pressures, are requested to show concern at the public issues, and gradually become a political actor in the global governance system (Scherer et al., 2014). Business activities, as described by Böhm et al. (2008, p. 170), as 'part of a wider discursive field of power relations involving companies, governments, NGOs and other civil society actors', involve resistance within the asymmetrical field of power relations. Scherer and

Palazzo (2011) point out that the business sector has begun to undertake both social and political responsibilities in global governance, going beyond legal requirements and filling the regulatory vacuum.

With further deepening of globalisation and internationalisation as well as industrialisation since the 1990s, the business sector has been committed to improving market positioning, influencing government policy, disciplining labour and sustaining social legitimacy. Levy (2005, p. 4) regards GPNs as ‘geographically dispersed global factories’, and uses a Gramscian understanding of hegemony to illustrate how international business shapes power relations in GPNs, where the state, the economic structure and civil society struggle for effects and profits and construct a new means of social formation (Levy, 2008). Hegemony in GPNs directs to the contingent stability, which can be achieved when technological, economic, discursive and organisational elements are appropriately aligned. Modern governance in GPNs requires not only ‘formal international agreements’ and ‘national-level regulations’, but also the ‘coordination of supply chains’ and the ‘promulgation of private codes of conduct regarding labour or environmental standards’ (*ibid*, p. 944).

The emergence of global environmental problems has called for a new way of environmental governance along the GPNs across different countries. Regulators should no longer ignore firms’ potential in the design of environmental governance (Newell and Levy, 2006). The growing significance of international environmental agreements for a wide range of industry sectors, and the increasingly important influences of corporate activities on both environment and governance systems, suggest that more emphasis should be placed on business entity and corporate strategy. According to the corporate activism engaged in the greening process, Berry and Rondinelli (1998) categorise three stages from the 1960s to the 1990s: between the 1960s to the 1970s, it was a period of outright denial that any environmental problem existed in business; in the 1980s, there was a trend to tighten the centralised regulation of business; from the 1990s, business became increasingly compliant towards environmental regulation. Since the early 2000s, environmental leaders have begun to seek going beyond the minimum legal requirements, to encourage business to voluntarily engage in more environmentally friendly activities (Evans, 2012).

Corporate activities, dominating each step of the supply chain, can serve as ‘a powerful engine of change toward addressing environmental concerns’ (Levy and Newell, 2005, p. 1). Firms are

directly or indirectly engaged in the process of resource depletion, energy use and hazardous emissions, generating great environmental concerns. According to Welford and Starkey (1996), business activities and environmental sustainability are always presented in ‘zero-sum’ terms, since economic growth harms the environment automatically. Thus, the environmental impacts of corporate activities cause firms to be central players in societal responses to environmental issues and play a key role in negotiating and implementing environmental policies at the national and international levels.

Environmental issues provide a valuable lens to ‘examine the question of global corporate power’ (Newell and Levy, 2006, p. 157). An increasing emphasis on the connections between corporate strategies and political spheres in environmental governance suggests an urgent demand for a flexible political economy approach. Therefore, the neo-Gramscian approach, connoting ‘a conceptual linkage between corporate strategies and international relations in constructing a political economy of international environmental governance’ (Levy and Newell, 2005, p. 49), can provide a dynamic and multi-dimensional perspective for evaluating the effectiveness of non-state actors in tackling contemporary environmental issues. The neo-Gramscian framework emphasises the effectiveness of corporate political strategies in constructing a political economy of international environmental regimes (Levy and Newell, 2002). Large corporations with huge amounts of technological and financial resources are expected to address environmental issues, and direct these resources towards effective environmental governance (Levy, 2006). In fact, with the guise of ‘corporate citizenship’, large firms are taking over the role of the states as political right providers and protectors towards environmental innovation and protection (Levy, 2011).

### **2.3.3.2 Civil Society**

Gramsci’s concept of civil society has application if emergent international NGOs play the same dual role envisaged by Gramsci; as semi-autonomous arenas of cultural and ideological struggle, and also as key allies in securing hegemonic stability (Levy and Newell, 2005, p. 54).

The neo-Gramscian framework provides a flexible approach not only to understand the nature of business power, but also to emphasise the crucial role of civil society in establishing modern legitimacy. Facing more high-profile environmental problems and relatively passive corporate



strategies, the neo-Gramscian approach suggests civil society to be one of the significant political struggles (Levy and Egan, 2003). As illustrated by Landy and Rubin (2001), it is necessary to engage society in the environmental governing process due to non-point source pollution generated by society at large, such as tailpipe emissions. Citizens have valuable knowledge about the places in which they are living, and sufficient capability to influence the environment. According to Evans (2012), sustainable development addresses the normative idea which civil society has the capability to impact how the places where they live are managed. There will be no sustainability without greater potential for civil society to take control (Irwin, 1995). In other words, people will become involved in civic environmentalism, owing to responsibilities stemming from their embeddedness in their own places, rather than some environmental ethic or a commitment to the state (Evans, 2012).

During the past half-century, the number and diversity of NGOs has exploded (Evans, 2012), and they have been a significant battleground for broader political and social conflicts. As the representative of civil society and social power, NGOs are integral to the philosophy of modern governance, playing an important role in facilitating collective action. NGOs act as autonomous social groups, balancing the power between the state and the capital in the complex processes of alliance building and accommodation (Levy and Newell, 2005; Lipschutz, 1992); and as significant political pressure groups, contributing to national and international policy-making directly (Betsill and Corell, 2008). Arts (1998) points out that NGOs are making some differences in global treaty formation and implementation with their growing political influence. To be more specific, NGOs have been engaged in governance through various channels, such as consultation to government or business, drafting treaties, regulating activities, and even influencing national and transnational policy-making (Betsill and Corell, 2008; Cashore, 2002; Charnowitz, 1997).

By supplementing, replacing, bypassing, and sometimes even substituting for traditional politics, NGOs are increasingly picking up where governmental action stops – or has yet to begin (Princen et al., 1994, p. 228).

NGOs, massively influential in the environmental field, ‘prioritise the inclusion of non-state actors in order to enhance the legitimacy of decisions’ (Evans, 2012, p. 68). Gemmill and Bamidele-Izu (2002) summarise five major roles of NGOs in environmental governance: collecting and analysing environmental information; offering environmental input to policy-

making; monitoring and assessing environmental performance; performing operational functions; and advocating environmental justice. Green NGOs can become involved in specific localities rapidly since they have pre-existing grassroots contacts, providing an acceptable substitute for government regulation, such as monitoring private compliance with environmental agreements (Evans, 2012). In recent years, industrial development and implementation of corporate social responsibility (CSR) practices have transformed some NGOs from challengers to partners, widening the hegemonic coalitions between corporations and NGOs (Levy, 2008). NGO-run environmental projects can prompt firms to join in, thus greening their brands and keeping up with their competitors (Evans, 2012). NGOs can be viewed as valuable partners to a certain extent, since sometimes their activities can cover areas in which the roles of governments and private companies cannot be played effectively. With the increasingly elevated status of NGOs in environmental governance, it has gradually been suggested that NGOs, as a democratic force for changes, are an arena of ideological struggle and an increasingly important ingredient of the extended state with hegemony secured.

The neo-Gramscian framework emphasises green NGOs' potential to outmanoeuvre rivals over environment domains (Levy and Newell, 2002; Levy et al., 2015). As a result of the growth of global environmental assessments and negotiations, environmental NGOs' legitimacy as well as their organisational capacity has been expanded to broaden alliance building in the political struggling over climate science and economics (Levy, 2005; Levy and Egan, 2003). Newell (2005) points out that there is an increasing amount of literature to focus on the importance of partnerships between business and NGOs. According to Levy and Kaplan (2008), NGOs are clearly growing in significance as an element of global governance. However, when governments and international institutions seek to involve NGOs in governance, the mechanisms adopted by NGOs are largely unregulated and informal, which creates a danger that NGOs over-represent special interest groups. Thus, it would be inappropriate for green NGOs sharing common goals and methods in their partnerships with various multinational corporations and governments in different places (Evans, 2012). With a gradual transition from government to governance, ever more focus has been placed on partnerships and forms of collaboration, and seeking to promote skills and expertise of non-state actors including firms and NGOs to manage specific environmental problems (Bendell, 2000; Newell, 2001). According to Levy and Newell (2005, p. 59), the business-NGO partnership should be regarded as 'part of the struggle for legitimacy and influence within civil society', rather than 'a demonstration of harmonious interests'.

With addressing non-state actors, environmental governance, as described by Kutting and Lipschutz (2009, p. 6), directs to ‘a complex process that typically seeks to juggle the views and approaches presented, for example, by different forms of indigenous local knowledge, official bureaucratic knowledge, and professional-technical global knowledge’. Görg and Rauschmayer (2009) point out that a better understanding of the scale issues in multi-level environmental governance is important to explain how the power relations are connected with distributional conflicts in political institutions. According to Levy and Egan (2003, p. 813), ‘the most distinctive contribution of the neo-Gramscian approach is a strategic conception of power’. The neo-Gramscian governance focuses on the capacity of agents to constitute social structures and effect changes in the economic, discursive, and organisational sphere, while being simultaneously constructed and constrained by them. Thus, a neo-Gramscian approach to hegemony in environmental governance provides particular strategies for state and non-state actors to be engaged in a war of position across the three pillars of hegemony; as well as intellectual coherence and a more critical understanding of environmental governance in a broader and more political context, with consideration of ‘corporate political strategy, environmental management, bargaining theory and institutional theory’ (Levy and Newell, 2005, p. 63).

However, although the neo-Gramscian approach provides a valuable framework for understanding the political negotiations and contestations among multiple actors in environmental governance, the application of Gramscian thought to other non-Western governance regimes is questioned. Taking China’s unique state-dominated governance regime as an example, without a deep understanding of the specific politico-economic heritages and particular historical trajectories in China, it is difficult to conduct an in-depth analysis of Gramscian hegemony in the context of China’s multiple models of VoC. Thus, in the following section, the researcher places specific focus on the application of the neo-Gramscian framework to a wide range of comparative governance regimes, especially to the varieties of governance in China.

#### **2.3.4 Gap for China’s Environmental Governance Studies**

With increasing focus on the politico-economic discourses of global environmental governance, there are a growing number of studies emphasising corporate political power and counter-

hegemonic power of civil society in international arenas of environmental governance from a neo-Gramscian perspective. For example, there is the corporate political strategy of European-based and US-based companies and their responses to the challenges of their hegemonic position as well as the political struggle within civil society (Levy and Egan, 2003); the increasing influence of non-nation-state actors in global climate governance (Okereke et al., 2009); the climate action of green NGOs and community groups in the UK, the US and Australia (Pearse, 2010); the political roles of firms and NGOs in the international environmental regime (Bled, 2010); the information tactics employed by ExxonMobil and Greenpeace to win the battle against climate change (MacKay and Munro, 2012); the struggle over climate imaginaries in the evolution of energy fields in the US (Levy and Spicer, 2013); and the diverse political work in Australia's emergent landscape of urban carbon governance (McGuirk et al., 2014). Since the nature of climate change is a political issue where varieties of organisations engage in contestation and collaboration, the neo-Gramscian approach provides a more sophisticated and dynamic analysis of how government agencies, business and civil society constitute the political economy of climate change within 'broader governance structures of neoliberal ideologies, institutions and geopolitical relations' (Levy and Newell, 2005; Wittneben et al., 2012, p. 1441).

Although the neo-Gramscian framework provides a fruitful way of understanding the political contestations in environmental governance, the application of Gramscian thought to a wide range of comparative governance regimes is questioned (Germain and Kenny, 1998; Hall, 1986). As listed above, most empirical studies on environmental governance with the multiple actor-centred perspective set within the context of 'liberal market economies' (Hall and Soskice, 2001), such as the US, the UK and Australia. In other words, most Gramscian governance studies, with a neo-liberal perspective, are too Anglo-Saxon centred; there is hence a need to have a more plural view on what is going on in other politico-economic systems of the world, with macro consideration of varieties of governance. Post-World War II capitalisms have displayed great variations of social relations and hegemonic struggles among the state, economic structure and civil society. The hegemonic coalitions and bargaining processes over the environmental domains display distinctive characteristics associated with the particular set of actors and institutions and the power structure of organisation fields (Levy and Newell, 2005).

For instance, Southern Africa has experienced a long period of regional cooperation, which has been the most distinctive feature in the formation of the post-colonial institutions and modern politico-economic systems. With militarisation of the states and regionalisation of the markets in

Southern Africa, such a region-building process usually provided scant emphasis on civil society in legitimacy, and directed to ‘a low level of relevance of civil society’ (Söderbaum, 2007, p. 319). In recent years, with the ‘new regionalism’ emerging in Southern Africa, civil society, as a dynamic force at the regional level, has played an increasing role in transnational regional integration. However, because of regional donors’ market-oriented and volatile funding preferences, civil society organisations are confronted by a vulnerable financial situation, which constrains the development of their agendas (Godsäter, 2013). Taking climate change governance for example, nowadays, there is a growing recognition that climate change and environmental deterioration present unique challenges for regionalisation and sustainable development on the continent, which are especially accentuated by poverty and lack of resources. With a rising environmental awareness, civil society organisations are expected to engage more in combating the negative impacts of climate change. However, in the context of ‘widespread poverty and deprivation amid population growth’ (Simon, 2012, p. 236), environmental governance seems far more difficult and costly for the public to tackle. Therefore, in Southern Africa, inter-governmental organisations play a key role in an effective region-building process to combat the negative impacts of climate change (Nathan, 2012; Saunders et al., 2012; Söderbaum, 2007).

Compared with Southern Africa, in the new era of neo-liberalism, many East Asian countries, such as China and Indonesia, as well as Japan and its emulator states such as South Korea and Singapore, still took a soft government-led path-dependency (Brandt and Rawski, 2008; Johnson, 2002; McCann, 2014). In Japan, the public is better informed, but still mildly restricted by the government. In Japanese capitalism, to be more specific, large corporations are encouraged to generate inimitable corporate strategies which ‘take advantage of the capacities for cross-sector technology transfer and rapid organisational redeployment provided by the *keiretsu* system’ (Hall and Soskice, 2001, p. 35; Morgan, 2009). The conglomeration of businesses holds a huge amount of political and economic power, and employees have little choice but to strictly follow what is required of them. Favourable connections between business networks and different levels of government are important in ‘Japan’s somewhat conservative, insider business culture’, which makes the Japanese political economy opaque and its ethics questionable (McCann, 2014, pp. 333-334). In China, freedoms of speech and press are still confronted by a strict constraint, directly inhibiting the influence of civil society in politics. Authoritarian rule is regarded as indispensable to national development, and thus, ‘a grand but unspoken bargain’ exists between the state and civil society in China (Brandt and Rawski, 2008, p. 17, McCann, 2014). Under such a soft authoritarianism, different levels of government are mainly under the obligation to develop

efficient and effective ways toward sustainable development in environmental governance.

Different from the hegemonic relations in the ‘regionalism’ in Southern Africa and the ‘soft authoritarianism’ in East Asia, the power relations in the European economic model manifest in two aspects: first of all, the technological innovation in European countries was private initiative, in which governments usually play a secondary and passive role; second, whenever governments express a hostile attitude towards technological change and innovation, they have to ‘face the consequences in terms of its relative status in the economic (and eventually political) hierarchy’ (McCann, 2014; Mokyr, 1990, p. 223). Thus, stemming from Anglo-Saxon countries, the neo-Gramscian approach, with a full consideration of neo-liberalism, addresses the crucial role of non-state actors to outmanoeuvre the state, which is often Western-biased in its application. The researcher concurs with Murphy (1998), Levy and Newell (2005), and Scherer et al. (2014) that the government-corporation-NGO interface provides a profound understanding of institutional diversity, and a strong theoretical basis with which to discuss the dynamics of contemporary political contestations in environmental governance. How to extend the neo-Gramscian perspective of hegemony to the unique context of Chinese state-dominated politics is, however, the main task for this research.

In short, at the current stage, there are very few empirical studies applying the Western-based neo-Gramscian approach to China’s changing governance regimes and drawing a completely different image of hegemony from the neo-liberal countries. As indicated by Lo and Tang (2014), without a deep understanding of China’s complex institutional diversity based on its specifically historical and politico-economic trajectories, it is difficult to make a clear and reasonable analysis of the changing hegemony in China’s varieties of governance. Thus, the neo-Gramscian approach needs to be integrated with China’s varieties of capitalism, so as to investigate the changes of hegemonic struggles among the state, business and civil society in the development of China’s environmental governance.

### **2.3.5 A Critique of Gramscian Governance Research**

Based on a neo-liberal perspective, most Gramscian governance research focuses more on emphasising the increasing influence of corporate political strategy in environmental assessments and negotiations and the growing potential of NGO activism in contestations over the environmental issues. Compared with the empowerment of non-state actors, the neo-

Gramscian perspective usually disempowers the state intervention in contemporary hegemonic struggles and institutional formations, with overestimation of free market and free society (Marquand, 1997) as well as one-sided accentuation of neoliberalism and post-nationalism (Jessop, 2002). In fact, it is too simplistic to claim that the state has gone and the power has moved from the government to business and civil society. In contemporary alliance building, the state still matters in ‘securing the key conditions for the valorisation of capital and the reproduction of labour-power as a fictitious commodity’, with overall political responsibility for ‘maintaining social cohesion in a socially divided, pluralist society’ (Jessop, 2013, p. 8).

Bob Jessop has clear ideas on the paradox of state power, which is embedded in the structural coupling of the economic and political, and linked to different forms of civil society (Jessop, 1997, 2008). Facing the emerging crisis of neoliberalism, neoliberal capital and its allies also appeal for the decisive ‘return’ of the national state to resolve economic, political and social problems in a coherent way, although neoliberalism has restricted the state’s capacity to resolve these crises (Jessop, 2010). In fact, even in the most neo-liberal countries, the state is still important in creating and preserving the institutional framework for the neo-liberal market, and guaranteeing the quality and integrity of money and the proper functioning of markets, through setting up military, defence, police and legal structures (Harvey, 2005). Especially in non-market areas, such as environmental pollution and climate governance, state action is rather significant in constructing and securing the functioning of organisational structures. Therefore, it is meaningful for neo-Gramscian governance research to consider Jessop’s historical-materialist analyses of the state and clarify institutional variations of the state and different power relations involved along different lines, so as to provide a more comprehensive and coherent view on varieties of governance.

The Gramscian studies of Levy and his colleagues, with particular emphasis on the importance of private regimes in challenging groups with superior resources, contribute greatly to the neo-Gramscian studies on environmental governance. They consider business and NGOs as increasingly important actors in the process of political bargaining and negotiation over climate change (Levy and Newell, 2002, 2005; Levy and Spicer, 2013). Large corporations, with huge technological and financial resources, are taking over the role of the states in constructing a political economy of the international environmental regime (Levy, 2011; Levy and Jones, 2006). The increasing importance of coordinating the deployment of economic, political, and discursive strategies suggests a strategic conception of corporate power, which offers opportunities for

groups with fewer material resources to challenge the hegemonic position of the state with structural advantages (Levy and Newell, 2005). At the same time, with the increasingly elevated status of NGOs in environmental governance, their political potential to outmanoeuvre rivals has been expanded as a result of the growth of global environmental struggles (Levy and Egan, 2003; Levy, 2005). Industry development and implementation of CSR practices have transformed some NGOs from challengers to partners, widening the hegemonic coalition (Levy, 2008; Levy et al, 2015). NGOs, as a democratic force for change, are clearly growing in significance as an element of global governance (Levy and Kaplan, 2008), and it is gradually being suggested that they are an arena of ideological struggle and an increasingly important ingredient of the extended state with hegemony secured with a neo-Gramscian consideration.

However, although Levy and his colleagues use the neo-Gramscian framework to imply that all three main actors have similar access to power in governance, the main focuses of their writings are usually placed on a pluralistic interpretation of Gramsci. There have been less clear interpretations and explanations on the exact themes of government roles and how they function in coordinating hegemonic coalitions and constructing contemporary governance regimes in their writings. Thus, to a certain extent, a Western-biased perspective limits the neo-Gramscian approach's application in other different governance regimes, such as the regionalism in Southern Africa, and the soft authoritarianism in East Asia, especially for those contexts in which the state power still matters significantly in hegemonic struggles, for instance, China's state-dominated regime.

In 'comparative capitalisms' literatures, a number of scholars try to give clear explanations of the re-regulation and re-configuration of state power along different lines, so as to develop the debate on capitalist diversity; for example: different roles of the state in contemporary alliance building (Freeman, 2007; Mäkinen and Kourula, 2012; Morgan, 2009; Rawls, 2001); varying degrees of government involvement in political systems (Steurer, 2013); different types of state and complementary institutions (Whitley, 2005, 2007); and different mechanisms of state power to impose specific patterns of valorisation, appropriation and dispossession (Jessop, 2008, 2014). Such types of research can help to extend Gramsci's framework to a broader range of politico-economic regimes. Therefore, although the neo-Gramscian approach is widely used as a critical theory for a kind of emancipation to the traditional hegemony in environmental governance, further studies need a more plural view on the diversity of contemporary institutional formations



along different lines, associated with different state powers, belief systems, social relations and hegemonic struggles between politics, economics and society.

## **2.4 A Neo-Gramscian Perspective on Varieties of Environmental Governance**

### **2.4.1 Varieties of Governance**

The contemporary institutional diversity comprises various typologies steered by different state and non-state actors from local to international geographical levels. Institutional diversity, as a set of basic structures of society manifested in the varieties of participation in complex governance, is of central concern to VoC analysis (Morgan, 2009). Structured by various national institutions, institutional diversity shapes and governs different economic structures (DiMaggio and Powell, 1983; McCann, 2014; Whitley, 1999). As early as 2001, Hall and Soskice (2001, p. 6) regarded political economy in VoC as a terrain constructed by different actors, who are ‘seeking to promote their interests in a rational way through strategic interaction with other actors’, but the institutional diversity as a binary distinction between LMEs and CMEs is abstractly defined at a theoretical level.

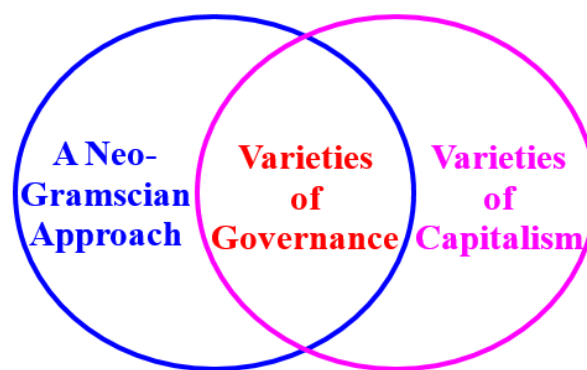
As illustrated in Section 2.2.5, in the ‘comparative capitalisms’ literature, many scholars critique the VoC approach as lacking historical, micro and institutional concerns about political contestations and accommodations of multiple actors in contemporary alliance building. Although corporate activities play a key role in improving national economic performance, through raising finance, securing access to inputs and technology, regulating working conditions and salaries, maintaining firm-employee relationships, ensuring workers’ requisite skills, and competing for customers, the business sectors also need to cooperate with other actors in multiple spheres of political economies in order to prosper in the long run (Hall and Gingerich, 2009). With increasingly pluralistic themes of roles of the state, business and civil society in the varieties of regimes, the VoC approach to political economy should be multiple actor-centred, rather than firm-centred or state-centred; and should be rooted in micro-level hegemonic struggles and contestations on organisational fields, rather than abstract and macro-level divisions of post-World War II economic regimes; so as to clarify complex institutional diversity and dynamic hegemonic struggles within varying politico-economic systems.

Hegemony, as a crucial conception in the modern pluralism of global political and social orders, would be constructed ‘if the relationship between intellectuals and people-nation, between the leaders and the led, the rulers and the ruled, is provided by an organic cohesion’ (Gramsci, 1971, p. 418). Then with the establishment of hegemony, an exchange of individual elements between the rulers and the ruled can take place with the creation of the historical bloc, which implies the existence of hegemony (Sassoon, 1987). More specifically, a historical bloc consists of particular ways of various classes construct hegemony within national political frameworks (Bieler and Morton, 2004). Therefore, a historical bloc perspective on VoC involves the participation of governmental agencies, corporate elites, NGOs and academic professionals in the varieties of institutional formations (Cox, 1983, 1987; Levy and Newell, 2005; Murphy, 1998). Towards the critiques of VoC, a multiple-actor perspective with a dynamic understanding of the politico-economic, sociological and ideological aspects of power relations involved in different institutional settings is needed. The neo-Gramscian framework, which integrates agency, dynamics and power into field-level politics, and provides a collective perspective on the dynamics of contemporary political contests engaging a variety of actors (Levy and Egan, 2003), can enrich the ‘lean’ societal theory and politico-economic theory in VoC (Bieling, 2014).

However, as illustrated in Section 2.3.5, the neo-Gramscian perspective usually focuses overly on a pluralistic interpretation of Gramsci and disempowers the role of the state in contemporary institutional arrangement to a certain extent. Extending such a theoretical framework with a Western-bias to the East Asian countries under soft authoritarianism, such as China’s state-dominated society, may cause some confusion over the re-configuration of state power in constructing modern regimes. The prevalent governance regime in China differs significantly from those institutionalised in the US or the UK or other European countries (Buhr and Frankenberger, 2014; McCann, 2014; McNally, 2012; Morgan, 2011; Whitley, 2007). Towards the critiques of Gramscian governance research, the VoC approach, providing a macro insight on varieties of institutional architectures and placing great emphasis on institutional variations of the state in contemporary political contestations and negotiations, matters for investigating particular political regimes different from those in Anglo-Saxon countries.

Post-World War II capitalism displays a great diversity in institutional formations and foundations across countries. With increasingly pluralistic themes of roles of government agencies, corporations and civil society, merging a neo-Gramscian approach with the VoC approach, as shown in *Figure 2*, is meaningful for contemporary comparative institutional

analysis on organisational fields populated by multiple actors to advance their respective interests in rational ways with strategic interactions with others. On the one hand, the VoC approach provides a deep-seated analysis on macro-level variations of logics of political rules and economic activities across different countries, which extends the neo-Gramscian framework to a broader range of institutional diversity to identify institutional variations of the state and power relations that involved. On the other hand, the neo-Gramscian approach, with a historical perspective on micro-level hegemonic contestations and accommodations among multiple actors, enriches the lean and abstract divisions in VoC with a broader conception of power and politics, and provides a more dynamic and sophisticated understanding of multi-dimensional and multi-level governance regimes.



*Figure 2 Merging a Neo-Gramscian Approach with the Varieties of Capitalism*

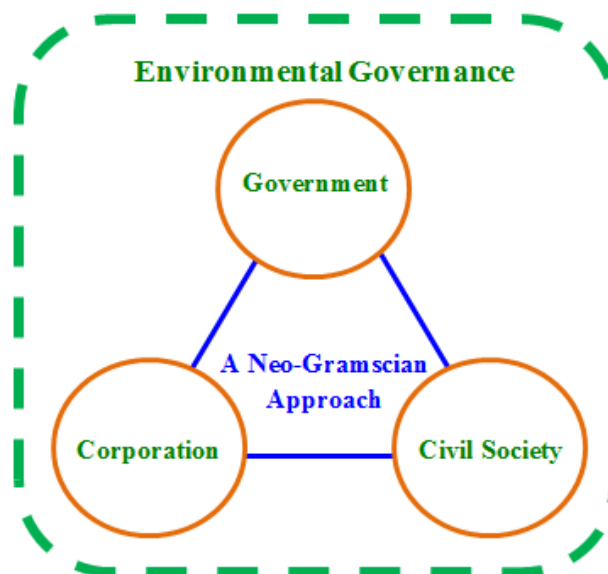
Different politico-economic systems provide different historical-geographical heritages on their respective discourses of governance in distinctive ways. Since there have been few historical and dynamic concerns in the VoC studies and less comparative breadth for the neo-Gramscian studies, merging the neo-Gramscian approach with the VoC approach is beneficial to incorporating the particular historical roots, politico-economic trajectories, national conditions, and social relations into the consideration of varieties of governance, so as to identify the distinctive institutional foundations of a particular regime as ‘the products of the past social conflicts and past institutional developments’ (Jessop, 2014, pp. 49-50), and clarify the specific hegemonic struggles and contestations among multiple actors within a particular territory at a given moment.

Therefore, in order to apply the Western-based Gramscian framework to China’s unique governance regime and discuss the complex hegemonic struggles among the state, business and civil society in China’s changing political economies, this research merges a neo-Gramscian

approach with the VoC approach to investigate China's varieties of governance in a more concrete and interpretative way. The complex varieties of governance in China, associated with distinctive belief systems and different hegemonic relations between the state, corporations and NGOs from the discourses in Western countries, can be better understood dynamically in a more descriptive way, at both micro and macro levels, with both historical depth and comparative breadth, by integrating the two approaches.

#### 2.4.2 Varieties of Environmental Governance in China

Since the 1980s, with the emergence of global environmental problems being a new crisis of hegemony, environmental governance issues have become a profound political process involving multiple actors in political contestations and negotiations. The neo-Gramscian approach provides a dynamic view on hegemonic relations between the state, economic structure and civil society in environmental governance (Levy and Egan, 2003; Levy and Newell, 2002, 2005; Levy et al., 2015), as shown in *Figure 3*.



*Figure 3 A Neo-Gramscian Approach to Environmental Governance*

Due to rapid industrialisation and phenomenal economic growth especially after the mid-1980s, China has been confronted with serious resource challenges and suffered from heavy environmental pollution. Introducing a neo-Gramscian approach to environmental governance, which is illustrated in Section 2.3 and depicted by *Figure 3*, can also provide a valuable and

dynamic understanding of the changing discourses of China's unique environmental governance regimes. In the new era of green economy, China's modern environmental governance also directs to a broad range of political, economic, and social structures and processes, involving both the state and non-state actors towards a scientific, harmonious, and sustainable development, although the state still plays a prominent role in developing rules, norms and routines for social behaviour. With a gradual institutional transformation from a government-led model in China's planned economy, to the current combination of multiple models of VoC in the market-oriented economy, the power relations among the three pillar actors have been quietly changing in China's environmental governance system. Within the context of state-dominated political economies, with ever more focus on sustainable issues from the central state, corporations and green NGOs have gradually become visible players in the development of China's environmental governance.

Varieties of regime structures and processes of governance, according to Levy and Newell (2005, p. 61), reflect the diversity of 'the power, resources, preferences and strategies of various actors', and direct to different hegemonic coalitions and bargaining processes between the state, business and civil society over the environmental regime. Dominant 'climate imaginaries', which may vary across counties, shape different responses to climate change by firms, governments and NGOs (Levy and Spicer, 2013). With an institutional consideration, contemporary China, engaged in 'an unfinished project' which continues to evolve, can be viewed as 'a combination of many models and systems' (McCann, 2014, p. 295). Taking Gramsci's conception of 'hegemony' and 'a historic bloc' into China's multiple VoC, it may be easier to make a clear illustration of the changing power relations in the development of China's state-dominated environmental governance regimes. Thus, the researcher proposes a neo-Gramscian perspective on China's varieties of environmental governance, to identify the institutional variations of the state and the hegemonic positions of non-state actors in China's complex governance regime, and discuss the changes of power relations with the development of China's environmental governance at both micro and macro levels, as shown in *Figure 4*.

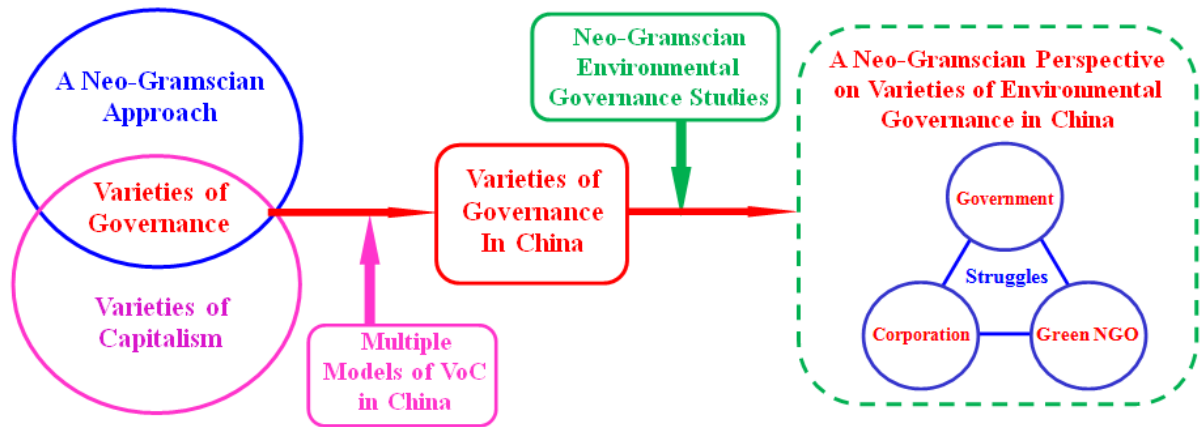


Figure 4 Theoretical Framework: Varieties of Environmental Governance in China

Thus, a neo-Gramscian perspective on China's varieties of environmental governance can help to identify the unique institutional formation, compliance and changes for China's institutional diversity, and the complicated hegemonic struggles among the state, economic structure and civil society in the development of China's environmental governance, which explains the formation of the particular historical bloc in a more interpretative way, and clarify the institutional diversity of the particular hegemony stemming from the unique political, historical, cultural, and social roots of the complex political economies of China. In order to investigate the exercise of state power to regulate and coordinate the hegemonic coalitions in China's environmental governance, this paper investigates the different hegemonic positions of governments, firms and NGOs as well as the changing 'triangular relationship' of the three pillar actors in the development of China's environmental governance. Based on the theoretical framework in *Figure 4*, this research enriches the abstract VoC typologies with China's unique institutional diversity; extends the Western-centric neo-Gramscian environmental governance research to China's distinctive regime; provides a more plural and dynamic understanding of the ideological, political and social dimensions of China's varieties of governance; and clarifies the institutional variations of the state in China's contemporary alliance building as well as the changing hegemonic struggles and contestations among state agencies, business and NGOs in the development of environmental governance, on the basis of the specific historical, political, economic and social trajectories in China.

## 2.5 Conclusion

With the critical reviews on the VoC approach in ‘comparative capitalisms’ literature and the neo-Gramscian studies on environmental governance, the literature review chapter combines the VoC and neo-Gramscian literatures to provide a critical view of shifts in China’s varieties of environmental governance. Section 2.4 proposed the theoretical framework, and as *Figure 4* shows, merging the neo-Gramscian approach with the VoC approach is meaningful in illustrating the particular assembly of economic, political and discursive relations which bind both the state and non-state actors within a particular environmental governance regime at a given moment. On the one hand, the VoC approach helps the neo-Gramscian framework to extend to other non-Western governance regimes, with particular emphasis on the institutional variations of the state and power relations involved; on the other hand, the neo-Gramscian approach helps the VoC approach to identify the post-World War II institutional diversity with consideration of the dynamic and micro-level hegemonic contestations and accommodations among multiple actors in institutional formations along different lines.

In short, with both historical depth and comparative breadth, a neo-Gramscian perspective on varieties of environmental governance, through combining a macro-level analysis of varieties of politico-economic regimes with a micro-level understanding of organisational struggles, is beneficial for the further VoC studies on the dynamics of institutional diversity and the further neo-Gramscian studies under varieties of governance regimes. On the basis such a theoretical framework, the following methodology chapter illustrates how the researcher carry out an empirical investigation on the exercise of state power in regulating and coordinating hegemonic alliance building in China’s varieties of environmental governance.

## **CHAPTER THREE: RESEARCH PHILOSOPHY, METHODOLOGY AND METHODS**

### **3.1 Introduction**

On the basis of the theoretical framework, as *Figure 4* shows, this research aims to discuss the changing themes of different roles of the central and local governments, BSRE and green NGOs as well as their complex hegemonic struggles at an organisational level in the development of environmental governance of China's rare earth industry. To conduct the empirical research, in this chapter, the major philosophical stances on environmental governance research and the main methodological position and methods in approaching the analysis are outlined. Section 3.2 starts from a brief illustration of ontology and epistemology in management studies, and then illustrates the ontological and epistemological positions of environmental governance research. Section 3.3 illustrates the reason for choosing the interpretivist approach and carrying out a qualitative study on the environmental governance of China's rare earth industry at an organisational level. Section 3.4 emphasises the research design, including the research diagram, research questions, research sites and qualitative research methods used for data collection and analysis, with a particular focus on Fairclough's critical discourse analysis.

### **3.2 Research Philosophy**

#### **3.2.1 Ontology and Epistemology in Business and Management**

Starting a research project, a feasible philosophy and research paradigm should first be confirmed in order to derive an appropriate methodology and methods for the research (Saunders et al., 2007). The research paradigm, as the basic belief system, guides the investigation 'not only in choices of methods but also in ontologically and epistemologically fundamental ways' (Guba and Lincoln, 1994, p. 105). A philosophy of science directs a set of ontological and epistemological assumptions, providing 'a platform that can establish the purpose of scholarly activity, help identify problems and point to appropriate methodologies' (Huff, 2009, p. 109). The philosophical stances also help construct a reference frame, which helps 'underpin a way to conceive of, and know about, a particular reality being studied in a research frame of reference' (Hallebone and Priest, 2009, p. 191).

An epistemological stance concerns what constitutes knowledge, while an ontological stance



focuses on the nature of reality (Saunders et al., 2007). The key question to an ontological stance is ‘whether there is a real world out there that is independent of our knowledge of it’ (Stoker and Marsh, 2002, p. 18); and the key question to an epistemological position is concerned with ‘whether the approach to the study of the social world can be the same as the approach to studying the natural sciences’ (Saunders et al., 2007, p. 104). Ontological and epistemological stances are related to each other, but need to be separated: an ontological stance refers to the researcher’s view about the nature of world; while an epistemological stance directs to what the researcher understands about the world and how it is understood. In short, an ontology can be seen as a theory of ‘being’; while an epistemology can be seen as a theory of ‘knowledge’ (Stoker and Marsh, 2002).

With consideration of these two positions in business and management research, Burrell and Morgan (1979) summarise that both epistemologies and ontologies contain different perspectives and ways of influencing the research process. Epistemology is important in understanding how the knowledge that is required during the research process is made intelligible: a positivist epistemology seeks to create descriptive and predictive principles and rules for a reality; an interpretivist epistemology seeks to describe and understand socially constructed realities; and a realist epistemology contains both describing and explaining processes (Hallebone and Priest, 2009). As illustrated by Johnson and Duberley (2000), epistemology considers the criteria adopted in the process of knowledge creation, providing a range of different approaches for management research. Ontology, concerning the existential reality of the phenomenon studied in management research, seeks to illustrate the particular ways through which the world operates, involving: objectivism, which means ‘social entities exist in reality external to social actors concerned with their existence’; and subjectivism, which means ‘social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence’ (Saunders et al., 2007, p. 108).

### **3.2.2 Philosophical Stance of Environmental Governance Research**

From government to governance, government narrowly concerns the formal structures of state authorities; while governance extends the governing practices to non-state actors such as NGOs, business and the general public, and concerns the wider range of politics, including the production, accumulation and regulation of collective goods at all levels. The contemporary debates on governance, according to Marsh and Furlong (2002), display different ontological and

epistemological positions in the main. On the one hand, most governance theorists are realists in epistemological terms, ‘emphasising how the continuity of rules, norms and operating procedures, and sometimes of deep, non-observable structures, can and does determine the outcomes of decision-making in the long term’ (*ibid*, p. 37). On the other hand, power relations in governance, with specific focuses on connections between different actors, is based upon a relational ontology (Evans, 2012).

Since the 1980s, the emergence of global environmental problems has called for a new method of studying environmental governance across different countries. Environmental governance signifies ‘the broad range of political, economic, and social structures and processes that shape and constrain actor’s behavior towards the environment’ (Levy and Newell, 2005, p. 2). Therefore, environmental governance research calls for both ‘interdisciplinary research’, requiring the development of a common framework in which different epistemologies are applied to investigate different aspects of a problem or an issue; and ‘transdisciplinary research’, referring to the integration of different disciplinary methodologies, ontologies and epistemologies to create shared knowledge (Jakobsen et al., 2004; Tacconi, 2011). For the scopes of environmental governance research, Adger and Jordan (2009) highlight three aspects: for the empirical strand, researchers discuss the changing landscape of policy making and implementation within which the non-state actors play a more important role; for the theoretical strand, researchers seek to illustrate the empirical changes with emphases on networks, hierarchies and markets; for the normative strand, researchers identify good governance policies to improve the machinery of government and to solve global environmental problems. In the process of such research, disciplinary integration needs to be combined with certain methodological considerations in addressing complex environmental governance issues.

According to Debarbieux (2012), the term ‘region’ can be viewed as one of the most striking features in environmental governance research. Regional environmental governance is difficult to conceive without consideration of national and global levels of decision-making and organisation. Considering this, ‘regionality’, as a component of an ontological statement, refers to different orders of reality within an ontological perspective, and regions have a heterogeneous status in the creation of knowledge with an epistemological position. Different kinds of regional entity are involved in ‘regionality’ as parts of the reality, such as nature regions, supranational organisations, decentralised affiliates of global organisations, and social configurations shaped by collective mobilisation or public participation. Therefore, environmental governance analysis

not only needs to take the ontologies of these regional entities for granted, but also needs to consider how these regional entities are established and coordinated in the various ontologies, how these ontologies interact, and how these factors lead to the institutional variations of different environmental governance regimes.

In the new era of low-carbon and green economy, the modern environmental governance system, from a neo-Gramscian perspective, should be identified as an arena in which the ‘state-business-citizen conglomerate’ plays an integral role in policy making and implementation (Skoglund, 2014, p. 151). The neo-Gramscian approach, differentiating from the major traditions and prevailing orthodoxy, manifests its philosophical stance as ‘a specific form of non-structuralist historicism’ in international studies, which directs ‘an epistemological and ontological critique of the empiricism and positivism which underpin the prevailing theorisations’ (Gill, 1993, p. 22). According to Cox (1987), Gramsci’s framework, different from abstract structuralism, is consistent with the idea of historical structures and has a humanist consideration. The notion of historical bloc makes it possible to conceive of the historical contents of different states, by emphasising which social forces may be important in the formation of a historical bloc; which contradictions may be involved within a historical bloc, and which potential may exist for the formation of a historical bloc. As a result, in Cox, a neo-Gramscian perspective of historical change to international relations can be understood as ‘the consequence of collective human activity’, to a substantial degree (Gill, 1993, p. 22).

For this research, introducing the neo-Gramscian approach to the development of China’s environmental governance also reflects the ontological and epistemological positions, with consideration of the historical, political, economic, and social implications on policy transformation as well as the varieties of contemporary political economies in China. The normative goal of the neo-Gramscian approach is heading for the solution of basic issues in political philosophy – the construction of an ethical state and society, in which economic and social liberation, democratic empowerment, open debate and personal development can be more widely attainable (*ibid*). Based on the ontological position of the state, business and civil society, the neo-Gramscian approach, aiming at a hermeneutic interpretation of the social construction of reality, assists to disclose the ‘truth’ of hegemony in China’s changing governance system. For Gramscian governance, with relational ontology as the core value, it is meaningless to discuss any single actor independently; and the connections between government, business and civil society are more valuable for in-depth interpretations of varieties of environmental governance

in China in the new era of green economy. The neo-Gramscian approach also provides a historical materialist vision to analyse the system from the bottom upwards and the top downwards in a dialectical appraisal of a given historical situation, and regards political economy as the aggregate of social relations configured by social structures (*ibid*). From a historical perspective, this research aims to discuss the profound implications of policy transformation in China on the changes of historical power structures in the development of China's environmental governance.

### **3.3 Research Methodology**

#### **3.3.1 Interpretivism**

As defined by Burrell and Morgan (1979, p. 227), the interpretive paradigm explains 'the social world primarily from the viewpoint of the actors directly involved in the social process', which can be employed to generate understandings of social phenomena, to resolve descriptive questions about social issues, and to develop descriptive theories on social science research. Bryman and Bell (2011) state that employing an interpretive approach means that researchers can gain surprising interpretations within the particular targeted social context. As illustrated by Baker and Bettner (1997), the interpretive approach and qualitative studies aim to describe, understand and interpret the issues sourced from the context of social science research.

Compared with the interpretivist approach, the positivist paradigm is less appropriate for this research. Being a positivist implies that the researcher is working with an observable social reality in a 'value-free' way. Positivist researchers view the way that knowledge is produced as independent and objective, and prefer to establish a hypothetic-deductive structure with a linear and rigorous process to produce law-like generations, in order to expand the range of a theoretic explanation (Hallebone and Priest, 2009; Huff, 2009; Saunders et al., 2007). In this process, objective and precise measures associated with quantitative data such as structured questionnaires and experimental studies are usually adopted in testing the hypotheses (Hughes and Sharrock, 1997). In this research, in order to investigate the changes in China's environmental governance regimes within the multiple Chinese models of varieties of capitalism, the complicated hegemonic struggles between the state, business and civil society are mainly perceived by insiders' self-perceptions relating to their physical activities in constructing a social structure. It is impossible to treat people and institutions as being separated from their particular

social contexts. Thus, with a focus on insiders' understanding of their social activities, value-free assumptions in positivism are not conducive to answering the research questions.

From the perspective of ontological and epistemological positions, this research aims to make a hermeneutic interpretation of the social construction of reality on the basis of narrative and discursive data. Therefore, the researcher chooses the interpretivist paradigm to resolve descriptive questions about social issues, which is more sensible and suitable for the discourse analysis of environmental governance in China's changing politico-economic systems. As transdisciplinary research, environmental governance studies usually integrate different disciplinary ontologies, epistemologies and methodologies to discuss hegemonic structures and institutional formations within a particular territory at a given moment. The logic of enquiries, in this research, is carried out from the personal understandings gained from government officers, corporate managers and NGO staff on their respective activisms to a group of images of China's changing environmental governance systems. This is the standard pattern of an induction logic, as 'a movement from observing specific statements or instances of a phenomenon and then, from their similarities or differences, adducing general statements' (Hallebone and Priest, 2009, p. 183).

In short, with considerations of the insiders' self-perceptions and interactions, interpretivism can provide a comprehensive illustration of the particular meanings and discourses of a social structure (Hussey and Hussey, 1997). Since this research aims to answer the 'descriptive' questions with a focus on the 'values' of insiders (Arbnor and Bjerke, 2008), the interpretive approach, emphasising subjective meanings of social actions and human beings' interactions in creating social reality (Bryman and Bell, 2011), is more feasible for the discussions on the changes of hegemonic coalitions among multiple actors in China's varieties of environmental governance, through merging a neo-Gramscian approach with China's institutional diversity.

### **3.3.2 Qualitative Approach**

For epistemological and ontological stances, most governance theorists are realists in epistemological terms, so that their logic is likely to be more inductive rather than deductive (Marsh and Furlong, 2002). Bevir and Rhodes (2010) introduce an interpretive approach into governance research, concerning narratives about practices, beliefs, traditions, and dilemmas based on 'meaning holism' and rethinking governance as storytelling. With the feature of

storytelling, most studies on environmental governance and the hegemonic struggles involved rest on the qualitative approach.

With the shift from government to governance in a postmodern epoch, environmental governance, as an ‘interdisciplinary’ research, reconciles many different economic and political factors. A neo-Gramscian approach to environmental governance directs to the development of a common framework in which different epistemologies are used to investigate different aspects of an environmental issue, usually in a nominal and descriptive way. A VoC approach also provides a qualitative insight into a more realistic set of different logics of economic activities and rules of the game in varying political economies. By integrating these two theoretical approaches, it is feasible to conduct a qualitative research to investigate the changing varieties of environmental governance in China’s contemporary politico-economic regimes. Thus, in this research, the researcher adopts a qualitative study to investigate the changing hegemonic positions of government agencies, corporations and NGOs as well as their dynamic power relations in the development of China’s environmental governance in a more interpretive way.

With a case study on BSRE in the Chinese rare earth industry, the researcher collects qualitative data via documentary review and semi-structured interviews; then carries out a critical discourse analysis based on the text discourses to generate statements on the discourses of environmental governance in the rare earth industry in China. The qualitative approach is more appropriate for solving the research questions and supporting the arguments as well as carrying out the discussions in this research. Therefore, based on the qualitative data, including both primary data from interviews and secondary data from documents, this research investigates China’s institutional diversity and environmental governance system at an organisational level, with discursive and word-based descriptions in the context of China’s changing political economies.

### **3.4 Research Design**

#### **3.4.1 Research Diagram**

A neo-Gramscian perspective on varieties of environmental governance, by means of introducing the environmental factor into varieties of regimes, brings politics and economic structures as well as institutional diversity into the research. Introducing a neo-Gramscian approach to environmental governance directs to a broad range of activism of the state and non-state actors

towards the environment, which influence the institutional formation of society and political economy.

China, with distinctive historical and political heritages, contains considerable divergences and great uniqueness in its varieties of governance, directing to the different ways of resource allocation and power distribution between the state and non-state actors during different periods. With a further complex layer of the institutional variation of the state and power relations involved, from a historical perspective, there are generally two stages for the significant changes of China's institutional diversity: the first stage is from the foundation of New China in 1949 to the early 1990s, during which China, following a Soviet-style development mode, had experienced a long period of planned economy, and the highly prescriptive planning from the central state dominated the economic, political, cultural and ideological domains of society as a whole; the second stage started from the 1990s with a series of far-reaching economic reforms towards a market economy implemented across the whole country, and the market-oriented transformation still matters in today's multiple models of VoC in China. At the same time, with a gradual relaxation of state control over the economic structures and even over public discourse, NGOs have gradually emerged between the state and the capital in China's state-dominated regime.

Based on a timeline of the development of New China, as *Figure 4* shows, this research integrates a neo-Gramscian approach with China's VoC to discuss the changing discourses of environmental governance of the rare earth industry at an organisational level. With an in-depth case study on BSRE, the researcher carries out an empirical study with particular focus on the changes of hegemonic positions of the different levels of government, BSRE and local green NGOs as well as their power relations in the contexts of China's varieties of environmental governance during the two periods. This is shown in *Figure 5*.

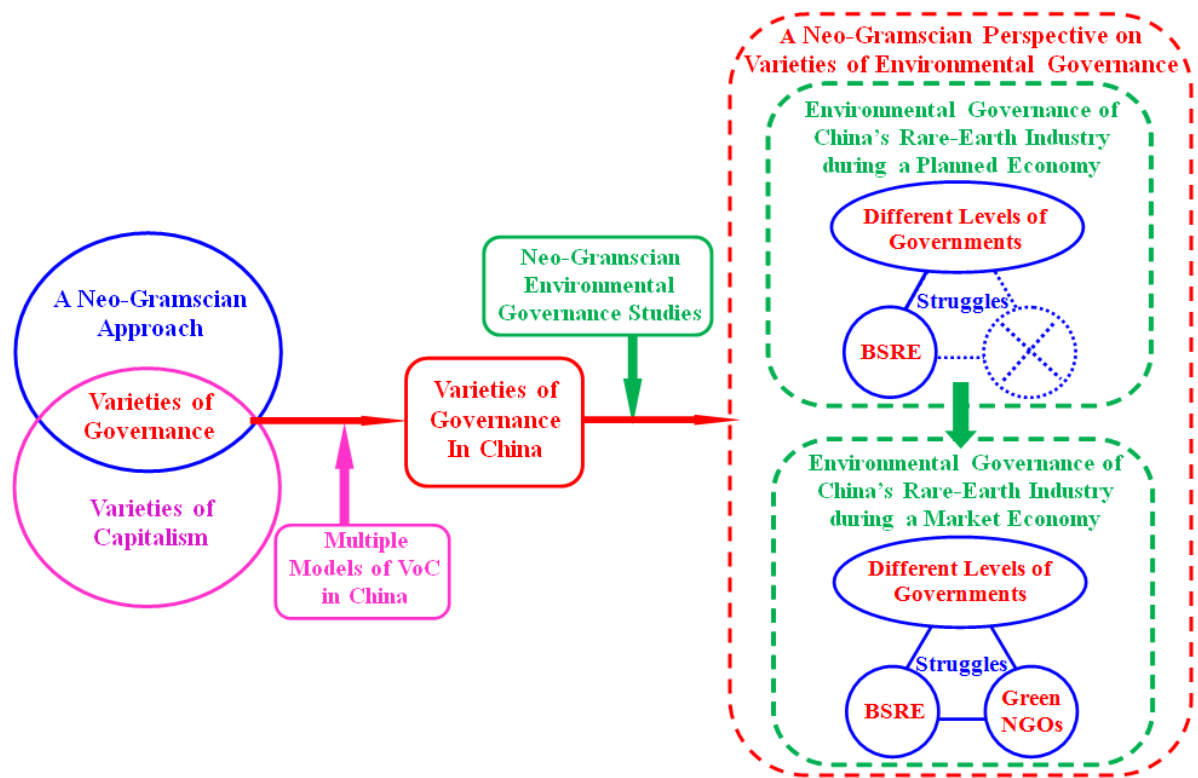


Figure 5 Hegemonic Struggles in the Development of Environmental Governance of China's Rare Earth Industry

### 3.4.2 Research Questions

Based on *Figure 5*, with a focus on the varieties of environmental governance of the Chinese rare earth industry from a planned economy (the 1950s to the 1990s) to a market economy (the 1990s to now) under China's unique politico-economic regimes, from a neo-Gramscian perspective, the research question is:

What are the different roles of the state, business and NGOs and their hegemonic struggles in the development of environmental governance of China's Rare Earth Industry?

In order to answer the above question, with a case study on the world's largest rare earth supplier, BSRE in Baotou, China, by merging a neo-Gramscian approach with China's VoC, the following sub-questions are considered:

- ◆ What are the politico-economic features of China's planned economy, and what model of VoC fits China's regime in the planned economy?



- ◆ What does a planned economy mean to the environmental governance of the rare earth industry between the 1950s and the early 1990s in China?
- ◆ What are the hegemonic positions of the central state and local governments as well as BSRE in the environmental governance of the rare earth industry during this period?
- ◆ What are the reasons for China's politico-economic reform from a planned economy to a market economy and how does it work?
- ◆ What model of VoC fits China's institutional diversity under the market-oriented economy?
- ◆ What are the implications of the politico-economic reform on the public discourse, and what does civil society mean to China's state-dominated regime?
- ◆ What are the implications of the transition from a planned economy to a market economy on the discourse of environmental governance in China?
- ◆ What are the different hegemonic positions of government agencies, BSRE, and green NGOs over a series of environmental issues in the development of environmental governance of China's rare earth industry?

### 3.4.3 Research Site

Rare earth, as illustrated in the introduction chapter, with the increasing demands in a range of ubiquitous high-technologies throughout the world, has become one of the most important strategic natural resources in China (Bernstein Group, 2011; Cooney, 2010; Nesbit, 2013; Saefong, 2009; Tabuchi, 2010). In the new era of low-carbon and green capitalism, applying rare earth materials in green technology has been viewed as an energy-efficient and environmentally-friendly solution to alleviate environmental crises (Spiegel, 2010). However, severe environmental pollution in the processes of mining, smelting and separating rare earth ores cannot be ignored. Since the concentration rate of rare earths in the ores is very low, rare earths must be separated and purified after mining, by means of 'acid baths' and 'hydro-metallurgical techniques', which generate a huge amount of wastewater and residues. The industrial waste contains various toxic chemicals and radioactive elements such as thorium and fluorine, poisoning groundwater and underground water systems in the nearby villages (Graedel et al., 2011; Rusu et al., 2006; The State Council Information Office of the PRC, 2012).

Particularly, long-standing rare earth smelting and separating activities in Baotou rare earth industry have caused a series of serious environmental problems. Especially during the 1990s, the mining chaos in Baotou, due to a lack of strict government control and regulation, involved

more than one hundred SMEs in rare earth rough processing. In order to maximise profit, all private SMEs engaged in immoderate mining and processing, which caused not only a serious waste of rare earth resources, but also led to a sharp deterioration of the local environment. Therefore, the researcher positions the research site on Baotou's rare earth industry, to investigate different roles of the state, business and green NGOs in environmental governance.

Since the late 1990s, reacting to the serious resource wastage and environmental pollution, as well as responding to the dramatic growth of rare earth demands in the global market, the central state has gradually realised the importance of rare earths as a kind of strategic resource for economic development and environmental governance. Since the early 2000s, the central state has carried out a series of consolidation plans for China's rare earth industry, targeting improved pricing and competitiveness in the global market, as well as establishing an effective environmental governance system. Nowadays, after a series of successful industrial consolidations in China's rare earth industry, BSRE, as the only legitimate rare earth corporation in Baotou, has monopolised the whole northern rare earth industry in China and has become the world's largest supplier of rare earth materials.

Therefore, the researcher carries out an in-depth case study on BSRE. The case study focuses on how the central and local governments, BSRE and local green NGOs play different roles in the development of environmental governance of the rare earth industry in Baotou. For the reasons for choosing BSRE to conduct a case study, during the interviews, both the senior managers of BSRE and the government officers from the Baotou government expressed their opinions on the unique advantages of BSRE as well as its representative to the Chinese rare earth industry from four perspectives, as follows:

*BSRE has strong resource advantages. Actually it fully controls the northern light rare earth resources. As we all know, light rare earth deposits in Baotou Bayan-Obo Rare Earth Mining District account for more than 85% of the total deposits in China, and more than 60% of the global deposits. Holding such rich deposits, BSRE has a unique and absolute industrial advantage with relatively lower costs in terms of mining, transporting and processing rare earths. (GOV2)*

*BSRE has the world's largest professional research institute, Baotou Rare Earth Research Institute, with the purpose of rare earth development and exploitation.*

*Besides, we also have 18 internal R&D centres established in 18 different subsidiaries, and our strong scientific research and technique skills make us world leaders in the rare earth industry. (COM5)*

*We provide strong support to BSRE in industrial consolidation. Apart from being supported by the central state at policy level, the Baotou and Inner Mongolia governments have also offered full support to BSRE regarding its actions in industrial consolidation. At present, it is the only legitimate rare earth mining corporation in northern China. (GOV1)*

*... [T]hrough the industrial consolidation [of the northern rare earth industry in 2013], we have established an integrated supply chain. We built up an integrated industrial chain with our 18 subsidiaries from mining, smelting and separating raw rare earth minerals, to deep-processing functional products including polishing materials, hydrogen storage materials, magnetic materials, luminescent materials, and catalytic materials, then to manufacturing a complete range of rare earth downstream products, like nickel-hydrogen batteries and magnetic resonance instrument. We believe such an integrated industrial chain can greatly improve our efficiency of resource allocations, reduce procurement costs, guarantee upstream product sales, and optimise internal industrial structures. (COM3)*

In short, with the strong support of the central state and the local governments, BSRE is now the only rare earth corporation in Baotou, and fully controls all light rare earth resources in northern China. Relying on the rich deposit of natural resources, BSRE secures its strong competitiveness in the global rare earth market. Research institutions established in BSRE also constitute a strong R&D capability to help develop outstanding scientific research in terms of rare earth processing and production. The integrated supply chain within BSRE ensures the efficiencies in rare earth mining, smelting and separating, and deep-processing, and saves extra expense for procurement and transportation. Based on the huge resource advantages and the strong financial and policy support from both the central state and the local governments in the industrial consolidation process, BSRE, at the current stage, is the largest rare earth supplier in the global market.

Therefore, BSRE's development in the past six decades represents the development of the entire

Chinese rare earth industry. Thus, the research site is placed on the environmental governance of Baotou's rare earth industry at the organisational level of BSRE. Inner Mongolia Autonomous Region is the researcher's home region, which provides more opportunities for the researcher to access BSRE, local government and local green NGOs via various '*guanxi*' (personal relationships in English). In the development of environmental governance of Baotou's rare earth industry, the researcher focuses on the different hegemonic positions of government agencies (including the central state, Inner Mongolia Autonomous Region government and Baotou government), BSRE and green NGOs, as well as their changing hegemonic struggles in the process of achieving sustainable development under the complex Chinese political economies.

### **3.4.4 Research Methods**

#### **3.4.4.1 Data Collection: Semi-Structured Interview and Documentary Review**

In line with the inductive focus on a multi-faceted understanding of complex empirical phenomena, a qualitative case study approach is employed, and the fieldwork is conducted for the purpose of obtaining primary data via semi-structured interviews, to provide primary evidence for the case study and support the arguments on the development of China's environmental governance. The core data are collected from semi-structured interviews, which were conducted face-to-face in person during March and April 2013, and August and September 2013. All interviews started from a series of fixed questions about interviewees' broad views on environmental governance in China, followed by a range of open questions according to their different positions as well as their responses.

Each interview usually lasted for one hour, and the research's ethical issues were carefully considered throughout all interviews. Strictly following the ethical requirements of the University of Essex, the researcher sent the written explanation to all interviewees before the fieldwork by email to explain the purpose of the interview and the interviewee's rights, and to promise the confidentiality of participants' information and the specificity of data for the research. In China, owing to the particular traditions, *guanxi* plays a significant role in bridging interpersonal communication across the whole of society. Without such a personal social relationship, it is difficult for the researcher to obtain access to any useful first-hand data about environmental issues from the business sector, not to mention from the government agencies. Although it seems a little informal to contact interviewees via personal relationship and confirm

the interview details by phone calls, it is almost the only way to obtain better access to useful and in-depth first-hand data in China. For the fieldwork in China, the researcher interviewed three government officers from different departments in the Baotou government, five senior managers of BSRE, and eight environmental officers from different green NGOs, with the aims to collect primary data from different perspectives and constitute a more comprehensive image of China's changing environmental governance regimes. More information about the interviewees is shown below:

- ◆ Three government officers of Baotou local government were interviewed. They are from three departments, namely *Baotou Economic and Information Technology Commission* (BEITC), responsible for implementing the national strategies and policies of the new industrialisation development from the central state, developing Baotou's industry and information technology improvement strategies, and promoting strategic adjustment, as well as optimising and upgrading industrial structures in Baotou; *Baotou Business Bureau* (BBB), responsible for domestic and international trade of the products manufactured in Baotou, and local economic and business development; and *Baotou Environmental Protection Bureau* (BEPB), responsible for local environmental governance.
- ◆ Five senior managers of BSRE were interviewed. They are from four departments, namely *Department of Marketing*, responsible for procurement and marketing linkage in the supply chain; *Department of Production Technology*, responsible for production and technology innovation; *General Office*, responsible for production security, media reception, public relations, and social activities; *Board of Directors* responsible for overall corporate strategies.
- ◆ Eight environmental officers from different green NGOs were interviewed, including four local green NGOs in Baotou and another four leading domestic grassroots environmental NGOs in Beijing.

With the consent of all participants, all interviews were conducted in Chinese, through intensive note-taking. Then, the researcher translated all the transcripts of interviews carefully. In order to confirm there was no discrepancy and ambiguity between what the researcher translated and what the interviewees presented, the researcher emailed the translated transcripts respectively to the interviewees for confirmation, and for consistency, replies were received accordingly. With the final confirmation, the researcher carefully summarised and analysed the transcripts' contents

for qualitative analysis and thesis writing.

Besides interviews, the researcher also collected relevant documentary data to support the analysis. In qualitative research, especially for the case study, documentary data, which are mainly collected from books, journal and magazine articles, newspapers, organisations' websites, notices, reports to shareholders, as well as memos and transcripts of speeches, can provide rich secondary evidence (Blumberg et al., 2011; Saunders et al., 2007). In this research, the researcher mainly collected government documents and reports, BSRE's CSR reports; and relevant media news concerning the environmental issues in China's rare earth industry. Through reviewing documents from different entities with different perspectives, combined with analysis of the interview contents, a series of features of the development of China's environmental governance can be delineated within the changing politico-economic regimes in China.

#### **3.4.4.2 Data Analysis: Critical Discourse Analysis**

Based on the transcripts of interviews and different kinds of document, the researcher employs the critical discourse analysis (CDA) approach proposed by Norman Fairclough as the qualitative data analysis method. CDA, as an interdisciplinary approach, views language as a form of social practice, and aims to study how social and political discourses are reproduced in text and talk (Dick, 2004; Fairclough, 2001, 2003; Fairclough et al., 2011). Fairclough et al. (2011, pp. 366-373) summarise the main principles of CDA: it focuses on social problems; power relations are discursive in society; discourse constitutes society and culture; discourse is historical; a socio-cognitive approach can expose the link between text and society; discourse analysis is interpretative and explanatory of content and context; discourse is a form of social action. By seeking 'how discourse practices within societal structures secure and maintain power over people' and discovering 'the rules, assumptions, hidden motivations, conditions of development and change, and how and why these changes occurred or were resisted' (Grbich, 2013, p. 246), the CDA approach fits well for this research purpose, to investigate the institutional variations of the state and the power relations that have evolved in the development of environmental governance of China's rare earth industry.

There is a three-level methodological framework of discourse: a language text, spoken or written; discourse practice as text production and text interpretation; and sociocultural practice. The first step is a textual analysis to make data description and metaphors (Fairclough, 2003).

The discursive texts are multi-functional, since the textual elements affect ways of acting, ways of representing and ways of being (Brei and Böhm, 2013). Fairclough (2003, p. 26) points out that discourse figures in three main ways in social practices: genres as ways of acting; discourses as ways of representing, and styles as ways of being. Genres, as ‘the specifically discursive aspect of ways of acting and interacting in the course of social events’ (Fairclough, 2003, p. 65), are regarded as the most important features of the particular discourse. Discourse, as ‘the ways of representing aspects of the world’ (Fairclough, 2003, p. 124), involves the processes, relations and structures in the ‘material world’, the thoughts, feelings and beliefs in the ‘mental world’, and the history, culture and power in the ‘social world’. In representing process, discourses can be identified and differentiated at different levels of abstractions, differing in their various degrees of repetition, commonality and stability over time. To identify different discourses from different perspectives within a discursive text, particular social or personal positions in ‘constituting particular ways of being’ should be clarified, which constitute the variations of ‘styles’. The second step is a process analysis to make an interpretation of discursive practice (Fairclough, 2003), and discuss ‘how the different textual elements hang together to produce an overall order and discourse’ (Brei and Böhm, 2013, p. 15). Following a process analysis, the final step is a social analysis, from a wider perspective of political discourses, to make an explanation of the effects of socio-cultural, politico-economic and historical discursive practices (Fairclough, 2003; Milne et al., 2009; Scharf and Fernandes, 2013; Vaara et al., 2010).

CDA can be used to discuss how a discourse develops from the perspective of historical formation and powerful groups, how a discourse works from the perspective of ordering and exclusion, and what the outcomes have been within a particular period of time. According to Grbich (2013, p. 251), the CDA approach can not only uncover the connections among ‘discursive practices, texts and events, and social structure and process’, but also clarify ‘social inequalities, hierarchies of power and non-democratic practice’. Compared with traditional discourse analysis, CDA considers not only linguistic production, but also distribution and consumption due to changes in economic, political, cultural and social factors. In this research, the environmental governance of the Chinese rare earth industry has become an increasingly urgent social problem. By merging a neo-Gramscian approach with the Chinese VoC, the particular contexts of China’s varieties of governance with the unique historical and politico-economic trajectories are important for analysing the development of the environmental governance of China’s rare earth industry. The CDA approach addresses institutional diversity in analysing different context discourses with focuses on social, political and historical factors in a

given region at a particular moment, and power relations between different actors, both of which are the main focuses in this research.

The multidimensional critical approach to discourse analysis is a suitable approach for research on discourse and discursive changes of social class, political power and the state in modern society, in terms of Gramsci's concept of hegemony. Fairclough (2010, pp. 129-130) summarises a 'dual relationship' of discourse to hegemony: on the one hand, hegemonic practice, hegemonic relation and hegemonic struggle to a substantial extent take the form of 'discursive practice in spoken and written interaction'; on the other hand, discourse is 'a sphere of cultural hegemony', and the hegemony of a class or group is in part a matter of its capacity of 'shaping discursive practices and orders of discourse'. The principal target of the CDA approach is to uncover and clarify opaqueness and power relations, which is meaningful for investigating the hegemonic positions of multiple actors as well as their hegemonic relations in the particular discourse of environmental governance within a given regime at a particular moment. Although CDA provides a feasible research tool for conducting empirical studies of power relations in Gramscian governance, at the current stage, there has been a lack of an empirical base with such a vigorous methodology in the neo-Gramscian research on environmental governance; for example, in Levy's work, the three-level methodological framework of CDA has always been ignored when the empirical studies of Gramsci's framework were conducted over the environmental contestations.

Moving to this research, the researcher focuses on the history of the environmental governance transformation in China's rare earth industry in the dynamic context shifting from a government-led development model to a market-oriented model with Chinese characteristics. Power relations between the state, business and civil society in the development of China's environmental governance have manifested great divergences during the past three to four decades. With a historical and dynamic perspective on the relationship between hegemony and discourse, the researcher uses CDA to provide a feasible and practical method to analyse both documentary data and interview transcripts about the dynamic hegemonic struggles among different levels of government, corporations, and civil society in the historical discourse of environmental governance of the Chinese rare earth industry. Based on the discursive practices of China's contemporary institutional formations, CDA, with special emphasis on the reproduction and contestation of political power (Fairclough and Fairclough, 2012; Fairclough et al., 2011), provides discursive illustrations on how the different actors shape the discursive practices and



the rules of the game and how the power relations are constructed and exercised in the changing discourse of China's environmental governance regimes.

Following the three steps of CDA, based on the two timeline stages, first of all, this research carries out a textual analysis to analyse the discursive contents of the primary data via semi-structured interviews, as well as the secondary data via documentary collection in a descriptive manner. A textual analysis aims to identify the changing genres of the discourse before and after the market-oriented reform based on the different hegemonic positions of three pillar actors in China's varieties of environmental governance, and the different styles of textual elements in describing the environmental issues in China's rare earth industry. Secondly, a process analysis is conducted to interpret how the different textual elements work together to interpret the discursive practices in the transformation of environmental governance of China's rare earth industry. Finally, a process analysis, with consideration of a wide range of unique Chinese historical, political, economic, social and cultural factors, is employed to explain the changes in hegemonic struggles among multiple actors over the environmental domain in the development of China's rare earth industry at an organisational level.

As a critical paradigm, the methodological framework was critiqued by Widdowson (1995), who stated that CDA is an exercise of interpretation and thus not analysis, which led to a failure to distinguish between text and discourse. In 1996, Fairclough published another article in the same journal to defend the CDA approach, which regarded Widdowson as misrepresenting Fairclough's conception of CDA in certain ways. Fairclough (1996) points out that he has always made this distinction: interpretation is a kind of language use while analysis refers to making meaning from written or spoken texts. Notwithstanding this, CDA has been widely used to denote a recognisable approach to draw upon social theories and methodologies for language analysis. In this qualitative empirical research, CDA's three inter-related dimensions of discourse offer a meaningful and vigorous methodological framework to carry out the analysis of the changing discourse of varieties of Gramscian governance in China and discuss China's varieties of environmental governance at both the macro and the micro levels. With a normative and explanatory social critique, CDA provides 'a much-needed method for analysing political discourse' (Fairclough and Fairclough, 2012, p. 245). In this research, CDA provides a dynamic and more descriptive way to analyse the collected texts, including documentary data and interview transcripts. Based on the three-dimensional analysis, a coherent understanding of Gramsci's framework in the changing discourses of environmental governance of China's rare

earth industry is generated, with consideration of the unique politico-historical heritages and politico-economic regimes in different historical stages in China, which helps to clarify the dynamic hegemonic struggles over the environmental domain in China's rare earth industry in the transition from a planned economy to a market economy.

### 3.5 Conclusion

In order to understand the dynamics of environmental governance of China's rare earth industry, this research adopts an interpretivist stance and employs a qualitative case study approach. Based on the research diagram of *Figure 5*, this research investigates the different roles of the state, business and NGOs and their hegemonic struggles in the development of environmental governance in China's rare earth industry at an organisational level. The researcher carried out the fieldwork in Baotou, China, the mother lode of global rare earths, and conducted an in-depth case study on BSRE, which monopolised the entire northern rare earth industry in China. BSRE's development represents the changes in the rare earth industry in the New China. Concerning BSRE, the researcher collected primary data from semi-structured interviews with the Baotou local government, BSRE and environmental NGOs as well as secondary data from documentary collection. To analyse the empirical data, with consideration of the relationship of discourse to hegemony, the researcher adopted the CDA approach to uncover and clarify the institutional variations of the state and the power relations that evolved within the context of China's varieties of environmental governance in the rare earth industry. Since most neo-Gramscian studies on environmental governance, for example in Levy's research, have not employed a specific analytical method such as CDA to carry out the empirical analysis, this study will provide a meaningful empirical base with the vigorous methodology of CDA's three-dimensional analysis for bettering the methodological design in further Gramscian governance research.

In the following two analytical chapters, first, a textual analysis is conducted to discuss the genres and styles of the discourses of environmental governance in China's rare earth industry before and after the market-oriented reform; then a process analysis is utilised to discuss how the different textual elements hang together to generate a comprehensive image of the transformation of environmental governance of China's rare earth industry; and finally, a social analysis is carried out to discuss the changes in hegemonic struggles among the different levels of government, BSRE and green NGOs over the environmental domain in China's rare earth

industry, with consideration of the unique context of the Chinese varieties of politico-economic regimes.

## **CHAPTER FOUR: ENVIRONMENTAL GOVERNANCE UNDER A PLANNED ECONOMY IN CHINA**

### **4.1 Introduction**

On the basis of the theoretical framework established in the literature review chapter and the methods summarised in the methodology chapter, this chapter discusses the discourse of environmental governance of China's rare earth industry in the planned economy from the foundation of New China in 1949 to the early 1990s. Based on the specific politico-economic heritages and the unique historical trajectories, Section 4.2, from the perspective of VoC, identifies the model of China's politico-economic regime in the planned economy and briefly illustrates the environmental concerns in China's rare earth industry during that period, with consideration of China's unique regime. Then in Section 4.3, the researcher, following the three dimensions of Fairclough's CDA approach as illustrated in the methodology chapter, discusses the discourse of environmental governance of China's rare earth industry at an organisational level, based on a case study of BSRE. Firstly, investigating the environmental struggles within the particular empirical setting of the Chinese planned economy necessitates a deep-seated understanding of the uniqueness of China's politico-economic regime, which directs to planning in state capitalism and will be further illustrated in the following section.

### **4.2 Planning in China's State Capitalism**

#### **4.2.1 Socialist Transformation from 1949 to 1978**

From the foundation of New China in 1949 to the early 1990s, China, following a Soviet-style model in its politico-economic system, had experienced a long period of planned economy (Knight and Ding, 2012; Wu, 2003). In the 1950s, as a relatively backward country in global terms, China adopted the 'command economy' system to promote the progress of industrialisation (Naughton, 2007). Since then, following a wholly government-led development model, China experienced nearly 40 years of central planning under the control of the State Planning Commission (SPC) organised by the central state. The main function of planning was to direct economic development and industrialisation, especially to promote the development of SOEs (Chow, 2011). In order to govern society, the central state arranged free medical treatment, education, employment, and housing for all citizens (Dong, 2003).

The adoption of such a politico-economic system had deep historical, political and social roots. At the beginning of the second half of the 20th century, China had just come out of a long war and achieved truly national independence with the establishment of a strong government – the Central People’s Government of the People’s Republic of China. The foundation of New China in 1949 marked the end of a 100-year history of semi-colonial, semi-feudal society in the Old China. However, due to the outbreak of the Korean War in 1950, China’s national security was still being threatened. In addition, at that time, China had a relatively lower level of industrial development with a huge population, resulting in serious market failure with scant agricultural surplus and tight supply and demand. Due to limited funds and professionals, and dispersed local governmental and private investments, it was difficult to expand production scale and improve technical levels (Knight and Ding, 2012; Naughton, 2007; Wu, 2003). Under the leadership of the less-experienced but powerful government in China, with a primary target of establishing an independent industrial system and rapidly improving the rate of capital accumulation and economic growth, from a historical perspective, it seemed reasonable for China to follow the Soviet route, develop a government-led model, and take the road of a planned economy.

In 1955, the ‘*First Five-Year Plan for the National Economy and Social Development*’ (*First Plan* for short) was issued in the *Second Session of the First National People’s Congress of the PRC*, which marked the start of the implementation of planned economic reform in China (The National People’s Congress of the PRC, 1955). This *First Plan* confirmed the ‘target’ of the economic recovery and development as the ‘establishment of the national socialist industrialisation’ and the means of achieving that, through the ‘progressive realisation of the socialist transformation of the agriculture, handicraft, and capitalist industry and commerce in China’, in order to institute a unified state monopoly of purchasing and marketing the products of private enterprises, as an advanced form of state capitalism. Since then, the central state implemented a nationwide ‘socialist transformation’, transforming the ‘neo-democratic economy’, in which planning and market coexist, to a ‘public-ownership economy’, in which planning and administrative control dominated the market. The implementation of the first five-year reform after the foundation of New China, with dramatic changes in the economic system, a huge number of participants, and profound influence on the whole of society, expanded and consolidated the collective ownership and state ownership across the whole country, which led China to move towards ‘an advanced form of state capitalism’ (*ibid*; Lin and Milhaupt, 2013; Szamoszegi and Kyle, 2011; Wu, 2003).

In 1956, the 8<sup>th</sup> National Congress of the CPC was held in Beijing, and the ‘*Report on the Suggestions of the Second Five-Year Plan for National Economic and Social Development (1958-1963)*’ (*Second Plan* for short) was issued (The National Congress of the CPC, 1956). The *Second Plan* fully affirmed the achievements of the socialist construction and socialist transformation, and proposed the new requirements for the development of the national economy as ‘further promoting the socialist transformation of the national economy to consolidate and expand the collective ownership and state ownership’, which was regarded as the cornerstone of the transformation of state capitalism to socialism (*ibid*). By the end of 1956, almost all private enterprises had been forced by the government to convert to joint state-private ownership, and the ‘socialist transformation’ had essentially been completed (Dong, 2003). Thus, the year 1956 was regarded as the first step toward operating a fully ‘socialist’ economy in China (Naughton, 2007, p. 67). In short, from the foundation of New China to the late 1970s, based on the central prescriptive planning of deepening the socialist transformation, the state eventually owned all the factories across the country, controlled the national pricing system, and allocated goods and resources to various producers directly. At the same time, ideological and social control was also extremely tight in the governance of the country, and the politics were always in forms of ‘commands’.

#### **4.2.2 Market Transition from 1978 to the Early 1990s**

However, the 30-year planned economy after the foundation of New China left great poverty and backwardness in China (Dong, 2003; Wu, 2003). The long-term combination of government function and enterprise management caused business to become an appendage of the government, which severely depressed the enthusiasm, initiative and creativity of enterprises and workers. Moreover, in the planned economy period, the single-minded pursuit of increasing industrial production neglected the needs of consumption and growth of the service and retail sectors. As a result, in the 1970s, the Chinese economy was teetering on the brink of collapse, with underdeveloped industry, low living standards, as well as poor levels of education, science and technology (Chow, 2011; McMillan and Naughton, 1992; Nolan and Ash, 1995). Especially after the ‘ten black years’ of the Cultural Revolution from 1966 to 1976 re-imposing Maoist thought as the dominant ideology, the ‘morale and public esteem’ of the CPC dropped to the bottom level (Gittings, 2005, p. 173), and the conflicts between the economic base and the superstructure peaked.

Confronted with an unprecedented crisis of confidence, the CPC realised that the relations of production in the highly centralised planned economy seriously hindered the development of the Chinese productive forces, which appealed for a further emancipation to fit ‘an advanced form of state capitalism’. In addition, facing increasing international competition from the global markets, the CPC led by Deng Xiaoping realised that the implementation of the ‘Reform and Opening-up’ policy could continue to enhance China’s economic power and comprehensive national power as well as international competitiveness. Therefore, from 1978, China began a new round of dramatic politico-economic reforms, by reintroducing incentives of the market to the command economic system. The State Economic Restructuring Commission (SERC) was established to direct economic reform, and transformed the economic system gradually towards a ‘market economy’, in which non-state enterprises such as the small and medium private enterprises as well as international corporations were allowed to exist and encouraged to compete with SOEs in the Chinese market (Chow, 2011; McMillan and Naughton, 1992; McNally, 2012; Nolan, 2014; Nolan and Ash, 1995; Wang, 1994).

In 1978, the Third Plenary Session of the 11th Central Committee of the CPC set the Reform and Opening-up policy as a new central guideline for economic development in China (Naughton, 2007; Tevev and Zhang, 2002). Since then, by gradually reintroducing incentives of the market within the command economy system, the market force started to work together with central planning via a dual pricing system. However, the central administrative plans still played a dominant role in the economic structure, especially before the target of establishing a ‘socialist market economy’ was proposed in the early 1990s. The legacy left by the command economy severely hindered the initial stage of the reform, which retained the supreme position of the central administrative plans in business (Knight and Ding, 2012). In fact, before the mid-1990s, China had never moved away from a command economy, and many institutions necessary for the functioning of a market economy had been rudimentary and even missing. Within such a social and political context, SOEs in China had dominated the entire economic structure under central planning.

Therefore, based on the illustrations of the politico-economic discourses of two stages under China’s planned economy, from the perspective of VoC, a unified state monopoly of the economic activities displayed a strong overtone of ‘state capitalism’, in which the state nationalised all means of production across the country and accumulated capital in a capitalist

manner based on the control of SOEs. Thus, before the early 1990s in China, in the context of state capitalism with Chinese characteristics (Fan et al., 2011; Harvey, 2005; Huang, 2008), the institutional mechanisms were very simple. China's state sector was comprised of the different scales of SOEs, and all business assets were owned by the state, respectively reporting to central, provincial, prefectural, county and other levels of government (Szamosszegi and Kyle, 2011). The state implemented extremely strict controls, not only over the economic structure though 'a hierarchical personnel system', but also over the entire ideological and social discourse (Naughton, 2007). During the planned economy, the genres of China's governance discourse were highly prescriptive plans, and such a centrally planned economy had guided the process of China's industrialisation for around forty years. In such a context, the environmental concerns in China's rare earth industry will be briefly illustrated in the following section.

#### **4.2.3 Environmental Concerns in a Planned Economy**

China chose such a government-led development model aiming to heal the wounds of war and to initiate rapid recovery of the national economy. Although the different levels of government had attempted to improve the efficiency of a planning system under the direction of the SPC, with further industrialisation and urbanisation, the planned economy exhibited a number of problems. Most business decisions were developed by the SPC members, the majority of whom lacked the appropriate knowledge and experience of business operations. In such a centralised system, the ideological orthodoxy restricted economic debates and bred a crisis for economic dislocations. The unprecedented degree of socio-economic control of the CPC brought about negative consequences in such a closed economic system. For example: attempts were made to reduce the waste of production, but instead a huge amount of waste was generated on a grand scale; attempts were made to prevent production for profit, but the model failed to replace it with an ideal communist or socialist production system; attempts were made to eliminate the short-termism of competitive capitalism, but the model lacked feasible alternative plans; and there was an intention to steer economic activities far from socially undesirable directions, but the model failed to change the underlying pattern of economic behaviour (Nolan and Ash, p. 981; Naughton, 2007; Nolan, 2014; Tenev and Zhang, 2002; Wu, 2003).

Over time, certain irreconcilable problems emerged within such an outdated politico-economic system, especially reflected in the conflict between economic growth and environmental protection. The most peculiar, dramatic, and ultimately tragic period during China's planned



economy started from the ‘Great Leap Forward’ in 1957 (Naughton, 2007). The Leap, as a simple intensification of the Big Push strategy, aimed to prioritise the development of heavy industries at any cost, in order to rapidly transform China from an agrarian country to an industrialised country and ‘surpass the UK and the US’ in industrial outputs. Within this extensive development model, environmental issues were considered less important by both the governments and corporations. Without sufficient environmental concerns from the central state, the environment became the biggest victim of the rapid economic growth. Especially after 1979, the protected industrial sector was gradually opened to private business, and a large number of SMEs, with rudimentary facilities and chaotic management mechanisms, had swarmed into the Chinese heavy industry sector, resulting in a huge amount of three kinds of industrial waste – waste water, waste gas and waste residuals – seriously damaging the ecological environment (Tao, 2009).

Especially for China’s rare earth industry, as illustrated in Section 1.1.2 and Section 3.4.3, the mining, selecting, dressing, smelting and separating of rare earth ores has ‘severely damaged surface vegetation, caused water loss, soil erosion and acidification, and reduced or even eliminated food crop output’ (The State Council Information Office of the PRC, 2012, p. 11). The light rare earth mines in Baotou contained many kinds of associated metals, so that the smelting and separating processes of light rare earth ores inevitably generated a huge amount of hazardous waste with a high concentration of ammonium nitrogen and radioactive residues, which has seriously damaged the local ecological environment. BSRE was founded in 1961, indicating the start-up of the rare earth industry in Baotou. With the instructions of highly prescriptive commands from the central state, BSRE had been fully engaged in maximising outputs to meet the output requirements of the central state, without any concern for environmental issues. Under the strict control and direct intervention of the central and local governments, BSRE had little managerial autonomy during the planned economy.

*In the planned economy, following the central instructions, everything regarding BSRE’s daily operation was determined by our Baotou government and the Inner Mongolia government. We [local governments] retained all profits or bore losses of BSRE. (GOV1, Extract 1.1 - 1)*

*[A]t that time, [under the planned economy], without an efficient incentive system and performance measure, our employees, even managers had little*

*enthusiasm for working hard. Moreover, distortion of labour information between the corporation and the local governments caused many vacant positions in the corporation as well as some virtual positions without practical function. (COM3, Extract 1.1 - 2)*

*The most serious problem [of the extensive growth model] was environmental pollution. The different levels of government were responsible for cleaning up all the mess caused by SOEs [in terms of environmental damage]. SOEs in extractive industries engaged in immoderate mining and extensive production, in order to achieve the output requirements set by the central state. They considered nothing about environmental protection measures and investments. (NGO1, Extract 1.1 - 3)*

*Extract 1.1*, separately from the perspectives of the government, corporations and NGOs, indicates that within the central planning system, the different levels of government, relatively far away from daily corporate operation, usually developed inappropriate decisions for corporate governance and development. The defects were manifested at the corporate level, taking BSRE for example, not only in its position vacancies, inappropriate recruitment, and lower working efficiency, but also in its lack of concern regarding environmental performance. According to Tao (2009), during the period of China's planned economy, the central state had not realised the serious consequence of extensive economic growth on the environment, and so environmental protection had always given way to economic growth. There were no specific environmental protection regulations and institutions, which had eventually led the extractive industries to discharge waste water, waste gas and waste residues with no regard for the environmental effects of such actions. Accompanied by the rapid improvement of the national economy in the planned economy, a range of successive serious environmental problems had appeared. After the 1980s, with a gradual relaxation of Party control over economic activities, the higher profit temptation and the lower entry barriers of the rare earth industry attracted a large number of private SMEs, many of which operated illegally, chasing profits through immoderate mining and processing. The mining chaos in Baotou, as illustrated in Section 1.1.2, rapidly depleted the local rare earth resources and caused a sharp deterioration of the local environment.

*Large numbers of private firms, with low-level techniques and very rudimentary equipment, flocked to the rare earth industry. The local*

*government's inefficient regulation and control on this traditionally protected but newly opened sector might be the main reason for this chaos. (COM3, Extract 1.2)*

Since most rare earth corporations in China during the 1990s operated on a small scale, the Chinese rare earth industry during that period featured a low concentration rate, poor research and development capabilities, and weak corporate-level core competency. The mining chaos brought about the accelerating decline of the rare earth reserves in China's major mining areas, and most of the original mine resources were depleted (The State Council Information Office of the PRC, 2012). Taking Baotou as an example, more than 150 private SMEs swarmed into Baotou's rare earth industry, most of which were engaged in illegal mining, which left more than one hundred heavily-polluted rare earth ore tailings dams, shown in Section 1.1.2. As output maximisation was the only target for the extractive industries, the ecological environment became the biggest victim of rapid economic growth under the extensive development model.

#### **4.3 Environmental Governance of China's Rare Earth Industry under a Planned Economy**

Based on the illustration of the discourse of Chinese planned economy as typical 'state capitalism' in Section 4.2, and the introduction to the environmental issues of Baotou's rare earth industry in Section 1.1.2, Section 3.4.3 and Section 4.2.3, this section focuses on discussing the discourse of environmental governance of China's rare earth industry at an organisational level, based on a case study on BSRE, within the particular period of China's planned economy. As illustrated in Section 3.4.4.2, the data analysis follows Fairclough's three-dimensional methods of CDA. Firstly a textual analysis is carried out in Section 4.3.1 to analyse the textual materials including the selected governmental documents and the transcripts of interviews, and describe the genres and styles of discourse of the environmental governance in China's rare earth industry under the planned economy. Following a textual analysis, a process analysis is carried out in Section 4.3.2 to integrate the different textual elements together and interpret the root of low efficiency of the environmental performance of China's rare earth industry. Finally, a social analysis is conducted in Section 4.3.3, from a wider perspective of political discourses, to discuss the environmental struggles between the different levels of government and BSRE in the context of China's state capitalism.

### 4.3.1 Description of the Roles of Government and Corporation in Environmental Governance: A Textual Analysis

#### 4.3.1.1 An Overview of Different Hegemonic Positions

First of all, a textual analysis is carried out to briefly describe the different roles of the government and corporations in China's environmental governance during the planned economy. Before the 1990s, Chinese civil society had little bargaining power and very few opportunities to struggle for civil rights (Wu, 2003). The environmental officers from different NGOs, during the interviews, expressed similar opinions on the role of civil society under China's planned economy, and one typical response is selected as follows:

*Not to mention civil society [in affecting decision-makings in governance], even large SOEs rarely had opportunities to 'speak for' them in business operations. The government determined everything in China through the central planning. ... [B]y the way, establishing NGOs was not permitted. (NGO5, Extract 1.3)*

From 1954 to 1956, a socialist transformation was conducted in China to facilitate the nationalisation of all the capitalist means of production. After that, all private enterprises, named as 'capitalist industry and commerce', had transformed themselves to collective ownership and state ownership, respectively reporting to the different levels of government. Due to the special political and historical trajectories, SOEs comprised not only of enterprises invested in and owned by the central state, but also of those invested in and controlled by the different levels of local government.

*We are owned by the local governments. The Baotou and Inner Mongolia governments were the only shareholders of us before 1998's corporate reform. (COM3, Extract 1.4 - 1)*

*During the planned economy, we operated just like a 'processing plant', rather than an 'independent business entity'. (COM1, Extract 1.4 - 2)*

*We exercised full management and control over BSRE following the central*

*instructions. We and the Inner Mongolia government were fully responsible for everything regarding BSRE. (GOV2, Extract 1.4 - 3)*

According to *Extract 1.4*, BSRE, therefore, is a typical local SOE, which was invested in and fully controlled by both the provincial government – the Inner Mongolia government, and the prefectural-level government – the Baotou government. The major feature of the hegemonic relationship between government and corporation under the planned economic system in China, taking BSRE as an example, is that BSRE strictly followed the central planning and fully complied with the local governments' instructions to carry out its business activities. The central state determined the total mining and production quotas, the prices of rare earth materials and distribution of products for the rare earth industry, and then required local governments to put these mandatory requirements into practice at the corporate level. For BSRE, the Inner Mongolia government and the Baotou government needed to implement the central planning at the organisational level, and guaranteed that BSRE would achieve the annual production quotas.

Thus it can be concluded that the feature of such a centrally planned economy was 'highly prescriptive planning', and the prescriptive plans from the central state and local governments determined every aspect of economic activities, including how to allocate resources, what to produce and how to produce, how to price and distribute and so on. Taking *Extract 1.1* into consideration, it is reasonable to conclude that, in the planned economy, the resource-based extractive SOEs performed passively in environmental governance and were rarely concerned about environmental issues during the mining and production processes. At the same time, the local governments also acted inefficiently in regulating local business activities and failed to develop effective sustainable development plans for local business. In fact, under an extensive economic growth model proposed by the central state, both local governments and SOEs had always fully engaged in maximising outputs, without any environmental concerns. In the context of China's state capitalism, the different levels of government, as the real managers of the different scales of SOEs, should be responsible for all environmental damage caused by SOEs.

From the 1950s to the early 1990s, China's state capitalism had dominated the economic structure and the social institutional formation in a holistic manner. With the central guidelines of the 'Great Leap Forward' to realise industrialisation rapidly, SOEs in the resource-based industries, with very little autonomy, had to strictly follow governmental instructions and engage in enhancing productivity, without the spare time and energy to build emission control and waste

treatment facilities. Such an extensive model in the Chinese heavy industries had caused serious environmental damage.

#### 4.3.1.2 Genres of Texts: Highly Prescriptive Plans

The discursive texts are multi-functional, since they affect ways of acting, ways of representing and ways of being (Brei and Böhm, 2013). Fairclough (2003, p. 26) points out that discourse figures in three main ways in social practices: genres as ways of acting; discourses as ways of representing, and styles as ways of being. Genres, defined by Fairclough (2003, p. 65), refer to the ‘specifically discursual aspect of ways of acting and interacting in the course of social events’. For this research, within the discourse of environmental governance within China’s planned economy, the genres of the discursive texts are the highly prescriptive plans from the central state. The highly prescriptive plans for the economic activities were mainly developed by the SPC. By means of top-down official policy documents, the central plans were conveyed from the higher level of government to the lower levels of government, finally becoming effective at the corporate level with the local governments’ instructions. Thus, central policy documents constitute important elements of the genre chain in the discourse of China’s planned economy.

Two typical central government documents are chosen by the researcher, the *First Plan* and the *Second Plan*, to analyse the roots of the inefficient environmental governance system in the context of China’s planned economy, which are briefly illustrated in Section 4.2.1.

*Our current goal is to ‘strive for a high rate of economic growth and socialist industrialisation’ ... [I]n order to achieve the goals of the First Five-Year Plan, we should follow the Soviet model of economic development, ... transforming the agricultural industry, the handicraft industry, and the capitalist industry and commerce to the joint state-private ownership ... and progressively realising the socialist industrialisation ... through nationalising all means of production and concentrating investments in the heavy industries. (The National People’s Congress of the PRC, 1955, Extract 1.5)*

The generic structure of the *First Plan* consists of two parts: the target and the route of China’s economic recovery and development. Achieving ‘a high rate of economic growth and socialist industrialisation’ is the most significant national target during the period of China’s planned

economy. As early as the beginning of the 19<sup>th</sup> century, many national industry giants and reform leaders in China proposed the idea of ‘saving the nation by engaging in industry’. After the foundation of New China in 1949, the CPC had realised that the great improvement of economic strength was the only way to secure a peaceful and stable environment for such a big country to ‘stand in the world’.

In order to achieve such a national target, under the leadership of the CPC, the ‘Three Great Transformations’ were implemented after the foundation of New China in 1949: transforming the means of production in the individual farming, the small-scale handicraft industry and the capitalist industry and commerce in China from private ownership to socialist public ownership, to institute a unified state monopoly of purchasing and marketing the industrial products, and realise an advanced form of state capitalism. In the first sentence of *Extract 1.5*, the term ‘socialist industrialisation’ in the context of China’s command economy connoted a special meaning: that is nationalising all industries in China. All private businesses were forced by the central state to transform to joint state-private ownership, and eventually to state and socialist public ownership. In 1955, the central state released an important guideline document ‘*Report to National Industry and Commerce*’ and required all local governments to study and understand the ‘spirit of the document’, in order to assist the central state to implement the central instructions of socialist transformation at the local levels. For the agriculture industry, the different levels of local governments guided the local individual farmers to transform private-owned means of production to collective ownership; for the handicraft industry, the local governments guided and organised the local individual craftsmen to establish ‘advanced handicraft production cooperatives’; for the capitalist industry and commerce, the local governments confiscated the local bureaucratic capital and transformed national private capital by means of redemption (GOV1). With the highly prescriptive plans of the central government and regulations of local governments, the socialist transformation was almost complete within just three years.

After completing the socialist transformation, the *Second Plan* was developed by the central state in 1956. The generic structure of the *Second Plan* also consisted of two parts: review and outlook. The *Second Plan* fully affirmed the achievements of socialist transformation and socialist construction after the *First Plan* was issued, and proposed the new requirements of the development of China’s national economy to realise ‘an advanced form of state capitalism’:

*Till June 1956, ninety-nine percent of private enterprises had completed the socialist transformation and adopted joint state-private ownership. ... [O]ver time, the percentage of state ownership is intended to increase and to exceed that of private ownership, in order to realise the nationalisation of capitalist means of production. ... [F]ocusing on the heavy industries, we should continue to strengthen the industrial building and upgrading, in order to establish a solid foundation of socialist industrialisation. ... [E]specially the improvement of the production capability of the steel and iron manufacturing industry is significant to realise industrialisation. (The National Congress of the CPC, 1956, Extract 1.6)*

Under the central instruction of promoting the socialist transformation of the national economy to consolidate and expand collective ownership and state ownership, China formally set out on the road to state capitalism. The maximisation of outputs became the only target for the heavy industries in China's planned economy. After the Reform and Opening-up policy of 1978, a series of economic reforms with limited market principles affected the Chinese politico-economic system, and private business and foreign investment were gradually permitted to exist in the Chinese market and compete with SOEs. However, due to the deeply historical and political legacy left by the command economy, most industries before the early 1990s remained state-owned, and government intervention in business was still powerful. At the initial stage of reform and opening-up, the central state secured a strong capability to enforce its politico-economic decisions on business activities, so that China retained a strong state capitalism for at least another ten years.

As for BSRE, it was invested in and fully owned by the Inner Mongolia government and the Baotou government during the planned economy. A government officer gave a brief introduction to the 'state-owned feature' of BSRE as following:

*The central government developed the mining, processing, production and distribution plans for BSRE annually, and then required the local governments to apply these indicators at the corporate level. The Inner Mongolia government was mainly responsible for supervising BSRE's production at the macro level and urging the Baotou government to carry out feasible and practical measures at the micro level. The Baotou government directly controlled BSRE's business activities. BSRE's managers were assigned by the Baotou government, and all*



*employees had an ‘iron rice bowl’<sup>4</sup>. (GOV2, Extract 1.7)*

The term ‘iron rice bowl’ is conducive to understand the feature of ‘big-government’ during that period of central planning. In China’s planned economy, SOEs owned by either the central state or the different levels of local government dominated the economic structure in state capitalism. For the central SOEs, the central state developed the production targets for them, and these quotas were conveyed to corporate managers directly in the form of official government documents – also known as ‘red-head documents’ started with a red title and stamped with a red seal – forcing corporations to abide by specified production requirements; for the local SOEs, the central state, based on local governments’ annual economic reports and achievement summaries, developed next year’s production plans also in the form of ‘red-head documents’, which were usually passed down to the provincial and other lower level local governments, requiring them to direct local enterprises to achieve the specified output requirements (GOV1). Thus, the feature of China’s politico-economic regime before the 1990s was typically ‘big-government’, and all economic activities were required to strictly follow the central instructions. *Extract 1.5* and *Extract 1.6* constitute the basic elements of the genre chain in China’s state capitalism. In such a context, the genres of governance in China’s planned economic period were highly prescriptive plans, as *Extract 1.7* shows.

#### **4.3.1.3 Different Styles of Texts**

Discourses are regarded as the ‘ways of representing aspects of the world’ (Fairclough, 2003, p. 124). In representing process of a particular discourse, different levels of abstractions can be identified with different perspectives of texts. The different ways of representing the same discourse constitute the variations of ‘styles’. For this study, the researcher focuses on how the different interviews articulate different discourses and constitute different styles based on their different positions. During the fieldwork of the interviews with three government officers and five corporate senior managers, interviewees from the different standpoints emphasised different perspectives of the inefficient environmental governance system in Baotou’s rare earth industry, on the basis of their different positions.

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<sup>4</sup> This is a Chinese idiom, referring to an abolished system of guaranteed lifetime employment. Before 1978 in New China, the working units under control of the central state had controlled the daily lives of all farmers and workers, allocating housing, food and clothing for them. Since all industries were state-owned properties, the central state and local governments provided guaranteed lifetime employment to the employees, and arranged free medical treatment, education and housing for their whole lives.

*There was no environmental pressure on SOEs; there was even no environmental awareness in the central state. What really mattered to SOEs was how to achieve higher productivity in a shorter time, so as to obtain more recognition from local authorities and the central state. (GOV1, Extract 1.8 - 1)*

*Particularly, even a few local governments have realised the importance of green growth to improve their achievements. Without mandatory requirements of corporate green performance from the central state, green investment from local governments was always difficult to implement in practice at the corporate level. (GOV2, Extract 1.8 - 2)*

*SOEs preferred to use the extra investment from the governments in expanding production capabilities. In the extreme cases, the extra funds from the governments directly flowed into the 'pockets' of corporate managers. (GOV3, Extract 1.8 - 3)*

*Extract 1.8*, from the perspective of the local government, indicates that the corporate inertia in environmental governance is rooted in a lack of environmental awareness of the central state and corporations. There were very few requirements for corporate green performance within the central planning. Without any environmental concerns, SOEs did not need to spend time and money in controlling environmental pollution. Internal corporate corruption was another important reason for the extra green investment from local governments becoming invalid, eventually leading to the low efficiency of environmental governing practices during the planned economy. Based on the government's standpoint, interviewees talked more about the corporate omission of environmental issues and the inertia of environmental practices.

Although corporate omission of environmental concerns was evidenced, should corporations be fully responsible for such a low-efficiency environmental governance system? As described by *Extract 1.4*, the corporations in the extractive and manufacturing industries during the planned economy seemed more similar to the processing plants, with very little authority. Without environmental planning from the central state, although a few farsighted local governments had certain environmental concerns, as *Extract 1.8* depicts, they were still powerless to carry out effective environmental practices at the corporate level. The senior managers in BSRE, from the

corporate viewpoint, emphasised the powerless position within China's environmental governance in the planned economy.

*Under the central guideline of maximising outputs at any cost, SOEs like us had neither extra energy nor extra money to engage in environmental governance. (COM1, Extract 1.9 - 1)*

*For the heavily-polluting rare earth industry, the costs of establishing waste disposal and treatment facilities were far more than those spent on mining, processing and producing. (COM3, Extract 1.9 - 2)*

*Extract 1.9* reflects the dilemma confronted by SOEs during the planned economy. BSRE, as a processing plant regulated by the central guideline of output maximisation and directed strictly by the local governments to fulfill the central quotas, could do nothing else but follow the central instructions and expand production capabilities. Without sufficient environmental awareness of the central state, the rare earth industry did not have extra money and energy, nor the initiative to engage in environmental governance practices. As illustrated in Section 1.1.2 and Section 3.4.3, the processes of smelting and separating rare earth resources inevitably generated a huge amount of industrial waste. As shown by *Extract 1.9 - 2*, the expense of improving processing techniques, upgrading waste emission facilities, and establishing sewage treatment ponds and waste recycling pools, was always too great to be afforded by SOEs or local governments in the mass production period. However, the corporate inertia towards the improvement of green performance and the certain subjective factors of SOEs were neglected in the corporate responses. In fact, although the central state has proposed to transit the traditional extensive economic growth mode to the modern intensive growth model since the 1990s, many heavily-polluting industries still maintained a high-input, high-consumption, high-pollution and low-efficiency production mode.

Based on a textual analysis, on the basis of *Extract 1.8* from the perspective of the government, and *Extract 1.9* from the perspective of corporations, the different positions used to emphasise the different perspectives of the discourses of one particular story can be clearly seen. These extracts from the interview transcripts identify two standpoints – the state and the capital – ‘from which they are represented’ (Fairclough, 2003, p. 129). However, these different styles and discourses can be integrated together to constitute a more comprehensive discursive text, which

is that the root of such an inefficient environmental governance system in the Chinese planned economy was not attributed to either local governments or SOEs, but lay with the poor environmental awareness of the central state. In the context of central planning, the high prescriptive plans from the central state determined everything in China. Therefore, without sufficient environmental concerns in the central planning, an extensive growth model led to an inefficient environmental governance system.

#### **4.3.2 Interpretation of the Root of Low Efficiency of Environmental Governance: A Process Analysis**

Following a textual analysis on the different positions of the state and business in the discursive texts of the environmental governance of China's rare earth industry under the planned economy, a process analysis is carried out to hang all texts together to interpret the root of low efficiency of China's environmental governance. Based on a case study on BSRE, in terms of the textual data including the government documentary plans and interview transcripts, the researcher focuses on how the local governments and BSRE positioned their roles in producing a particular discourse of the environmental governance of Baotou's rare earth industry during the planned economy.

From the previous discussion, it is reasonable to conclude that during the planned economy, a government-led development model dominated the Chinese political economy, in the form of state capitalism. According to *Extract 1.4*, under China's state capitalism, the central planning, together with the more detailed administrative instructions from the different levels of local government, determined all business practices, including corporate strategies, investment directions, outputs, product prices, and human resource management. *Extract 1.5* and *Extract 1.6* illustrate the central state more intensely focusing on the output maximisation of the heavy industries, and accordingly, ignoring the importance of sustainable development. With the citation of these two prescriptive plans, it is helpful to understand the background of an inefficient environmental governance system in the heavy industries such as rare earth, iron and steel industries under the Chinese planned economy. Adopting 'an extensive growth model' to promote industrialisation to the largest extent, everything such as policy, capital, and human resources in the heavy industries were fully geared towards maximising output. There were no clear regulations or particular clauses concerning the environmental performance of the heavy industries within the highly prescriptive plans. Therefore, in the discourse of China's state capitalism, without the central planning of environmental governance, both local governments

and heavy industries, under the central guideline of maximising outputs in an extensive growth model, failed to be actively involved in environmental governance activities, which eventually led to an inefficient environmental governance system under the planned economy.

This is also proved by the different styles of *Extract 1.8* from the perspective of the Baotou government and *Extract 1.9* from the perspective of BSRE, although different focuses were placed on the roots of the low efficiency of environmental governance. Due to the very limited national investment in the fledgling Chinese heavy industries, both local governments and SOEs were less capable of leading the heavy polluting industries towards sustainable development. The different textual elements hang together to produce an overall discourse of environmental governance in the Chinese heavy industries during the planned economy. The root of the low efficiency of environmental governance and the passive roles of local governments and corporation involved should eventually be attributed to the extensive growth model proposed by the central state. However, as illustrated in Section 4.2.1, due to the lower level of industrial development, the limited national capital, the dispersed local governmental investments and the lack of experienced professionals, it was difficult for the Chinese rare earth industry to develop sustainably in the planned economy. As *Extract 1.8* shows, the expense of improving the environmental performance of the heavily-polluting rare earth industry are much more than those needed for mining, processing and producing. Thus, to secure the physiological and safety needs of a huge population and better the people's lives in a shorter period of time, output maximisation was the only target to promote China's industrialisation and modernisation before the 1990s.

During the period of China's planned economy, although China began to draft the first environmental protection law in 1973, and successively established the Environmental Protection Leadership Group in 1974 as well as environmental institutions at the different levels of government, as introduced in Section 1.1.1, the seriousness of the environmental problems in the rare earth industry, especially in Baotou, had not been realised by the central state. The environmental information communications among the decision-makers of the central state, regulatory agencies of the different levels of local government, and corporations had always been ignored in the era of government-led development. Therefore, without sufficient environmental concerns from the central state and the effective feedback mechanisms from the local environmental bureaus to the central state, environmental governance gave way to economic growth during the planned economy in China.

### **4.3.3 Explanation of Hegemonic Struggles in Environmental Governance: A Social Analysis**

From a wider perspective of political discourses, a social analysis is conducted to discuss the conception of hegemony in the context of China's state capitalism during the period of the planned economy, with consideration of its economic, political, and historical trajectories. After the end of wars lasting more than 100 years in the Old China, the new central government established by the CPC finally realised its 'hegemony' politically in 1949, based on the violent hegemonic struggle in China's 'semi-colonial and semi-feudal society'. After the foundation of New China, the CPC had conceptualised its hegemony in terms of leading a series of successes in World War II and national independence, which established a broad, deep and reliable mass base in China. The political power of the CPC was manifested by way of control over economic structure and civil society. The whole of society, with only one faith – 'without the CPC, there would be no New China', became 'subject to hegemony' of the state (Blecher, 2002), and unconditionally followed both economic and moral ways developed by the CPC. With a strong mass base, the CPC's planning was consistent with the consensual basis of hegemony and the general interests of the whole proletariat, to complete the transition from an agricultural country to an industrial country, and the transition from a neo-democratic country to an advanced capitalist country and then to a socialist country.

Since the foundation of New China, the CPC, as the supreme dominant group, had begun to be concerned about how to govern the new politico-economic system and prevent the penetration of capitalism and foreign anticommunist forces. Among all social constructions in the New China, the economic system was regarded by the CPC as the weakest link to be penetrated by the capitalist ideology. Therefore, the CPC began to transform the private capitalism and commerce to joint state-private ownership and then gradually nationalised the means of production throughout the country. In the Old China, before the late 1940s, the bureaucratic and feudal capital monopolised the national economy. Stepping into the New China, the first act of the economic reform was to confiscate the bureaucratic and feudal capital and make it national property. After the completion of the socialist transformation, the CPC had obtained sufficient confidence and support from the public, and achieved hegemony with the full support of the proletariat in Chinese society.

In such a context, with consideration of national security, social stability, and economic growth, the central state confirmed the choice of central planning to further implement its hegemony in the New China. The central state with highly prescriptive plans determined every aspect of socio-economic constructions, and SOEs dominated the entire economic structure. In order to maintain the state power in governance, the CPC implemented extremely tight ideological and social control in the form of ‘command’ (Naughton, 2007). NGOs were strictly forbidden, and private ownership was no longer allowed to exist in the market. Under such state capitalism, both the business sector and the public sector kept the hegemonic acceptance of the core values of the CPC (Blecher, 2002). The CPC manifested its intellectual and moral hegemony in Chinese society through developing the national economy, improving people’s living standards, and constructing a socialist society. By taking into consideration *Extracts 1.1, 1.2, 1.4, 1.8 and 1.9*, it can be concluded that the central state established by the CPC, by successfully constructing alliances among workers, farmers and craftsmen as well as entrepreneurs and intellectuals in China, dominated the economic, political, cultural and ideological domains of society. According to *Extract 1.3*, civil society, under the overpowering state control in governance, had very little bargaining power to challenge the state hegemony, and the lack of NGOs had led to the complete ineffectiveness of civil society during the planned economy.

After nationalising all means of production across the country, the government had wielded the insignia of power in corporate governance during central planning. *Extract 1.7* illustrated the ‘state-owned feature’ of BSRE in the Chinese governance regime. It is clear that the central decision makings for the development of BSRE were developed from the SPC, and conveyed to the Inner Mongolia government, then passed down to the Baotou local government, which needed to direct BSRE to implement the plans at the corporate level. In BSRE’s governance, the central state played the role of ‘decision-maker’; local governments acted as ‘corporate managers’; and BSRE worked simply as ‘employees’. Even though BSRE was one of the largest SOEs in the Inner Mongolia Autonomous Region, it had very little managerial autonomy and could only play the role of a completely obedient follower of the central planning.

Thus, during the period of the planned economy in China, at the macro level, without sufficient attention being paid to sustainable development from the central state, the concept of sustainability was far from the minds of the business sector and the local governments, and completely alien to the public. Environmental governance, with less influence on maintaining hegemonic stability among the state, business and the public and promoting economic growth in

the planned economy, had always been ignored by the central state in developing national strategies. In the planned economy, environmental problems had not been considered as a crisis of governance in the rapid Chinese industrialisation process, and the central state had not realised that the serious environmental pollution was ‘a new threat to hegemony’. At the micro level, for BSRE’s performance, as depicted by *Extract 1.1*, all profits of BSRE were retained by the local governments, while all losses of BSRE were also borne by them. Considering *Extract 1.2*, with the commitment that the local governments cleaned up ‘all the mess’ obstructing BSRE’s development, such as financial deficit, employee dissatisfaction and environmental pollution, BSRE simply needed to intensely focus on the improvement of its productivity, without any environmental pressure, leading to bad performance in environmental governing practices. Moreover, the rare earth industry, as a typical high-energy-consuming steel and iron industry, but also with the obvious nature of a heavily-polluting chemical industry, had to face many ‘very tricky’ environmental issues, which were always difficult for the business sector to resolve alone (The State Council Information Office of the PRC, 2012). To implement effective environmental governing practices in the Chinese rare earth industry, a huge amount of investment, advanced technology and facilities, experienced professionals and strong government support are all necessary. During China’s planned economy, due to the lower level of industrial development and productivity and the limited and dispersed local government investments, it was very difficult to improve the green competitiveness of such a high-energy-consuming and heavily-polluting industry.

#### **4.4 Conclusion**

From the foundation of New China in 1949 to the early 1990s, China had experienced a long period of planned economy. The empirical findings pointed out that during the planned economy, the state, in order to maintain the state power in governance, implemented extremely tight ideological and social control in the form of ‘command’, and nationalised the means of production throughout the country. NGOs were strictly forbidden, and private ownership was no longer allowed to exist in the market. In such a context, the findings in 4.2 identified China’s politico-economic regime in the planned economy as state capitalism, in which a unified state monopoly of the market was instituted based on state control of SOEs that were owned by the different levels of government.

Under the Chinese state capitalism, a textual analysis was carried out in Section 4.3.1 to identify



the genres of the discourse of environmental governance of China's rare earth industry as highly prescriptive planning. Based on the different styles of textual materials, a process analysis was conducted in Section 4.3.2 to illustrate that the root of the low efficiency of environmental governance of China's rare earth industry under the centrally planned system stemmed from a lack of environmental concerns on the part of the central state. Following a social analysis in Section 4.3.3, the empirical findings pointed out that during the period of central planning, as a high-energy-consuming and heavily-polluting industry, the Chinese rare earth industry, with a lower level of industrial development and limited investment, found it very difficult to improve its environmental performance. Without the concern of the state and government support, SOEs in the rare earth industry had no money or energy, nor the initiative to engage in environmental governance practices. As output maximisation was the only target for the rare earth industries, the ecological environment became the biggest victim of rapid industrialisation under China's extensive growth model.

After thirty years of planning, China was still a poor country, and the CPC in China was confronted with an unprecedented crisis of confidence. To break out of this backwardness, the central state in China gradually realised the importance of market-oriented mechanism and sustainable development, and thus implemented a series of dramatic politico-economic reforms throughout the country. As a result, the discourse of environmental governance of China's rare earth industry is greatly divergent under China's market economy, which will be further discussed in the following chapter.

## **CHAPTER FIVE: ENVIRONMENTAL GOVERNANCE UNDER A MARKET ECONOMY IN CHINA**

### **5.1 Introduction**

Moving to China's modern market-oriented economy from the early 1990s, on the basis of the theoretical framework established in the literature review chapter and the methods summarised in the methodology chapter, this chapter discusses the changing discourses of environmental governance of China's rare earth industry. Based on the specific political, economic and historical trajectories, Section 5.2, from the perspective of VoC, identifies the model of China's current politico-economic regime, with particular focuses on the activism of civil society in the modern Chinese governance regime and the change in the state's environmental attitudes. Based on the illustrations of the discourse of the Chinese economic transition from a planned economy to a market economy, Section 5.3, following the three-dimensional methods of CDA, focuses on the changing discourses of environmental governance of China's rare earth industry based on a case study of BSRE. Firstly, to investigate the changing environmental struggles in the rare earth industry within China's modern market-oriented economy, it is necessary to identify the uniqueness of China's current politico-economic regime, which will be illustrated in the following section.

### **5.2 From a Planned Economy to a Market Economy in China**

#### **5.2.1 An Overview of the Transition**

As illustrated in Section 4.2.2, after thirty years of planning, China was still a poor country, and the CPC was confronted with an unprecedented crisis of confidence. Facing increasing international competition from the global markets, from 1978, the central state launched a series of far-reaching economic reforms. Tenev and Zhang (2002) divided the market-oriented reforms in China since 1978 into two periods: first, from 1979 to 1992, by reintroducing market mechanisms and incentives within the domain of direct state ownership and control, market forces began to work together with the central administrative plans via a dual pricing system; second, from 1993 to the early 2000s, this period featured significant large-scale changes in corporate reform of SOEs. Since central planning still played a key role in the economic activities, and SOEs still dominated and controlled the entire economic structure at the first stage

of the market-oriented reforms, the researcher views the Chinese market economy beginning from the early 1990s, which is a more prevalent timeline division, to discuss the changes in the discourses of China's varieties of environmental governance, with a case study on BSRE in Baotou's rare earth industry.

In 1992, Deng Xiaoping visited southern China and developed the new national target of 'establishing the socialist market economy', which marked the start of the new wave of market-oriented reforms. In the following year, the Third Plenary Session of the 14<sup>th</sup> Central Committee of the CPC issued the '*Decision of the CPC Central Committee on Some Issues Concerning the Establishment of a Socialist Market Economic Structure*', clarifying the necessity of the creation of a modern enterprise system and the development of private and foreign-invested enterprises in China. Owing to the gradually opening domestic market and the fiercer competition from the global market, all the SOEs had undergone different levels of 'major surgeries' in terms of their administrative structure, ownership, governance structure and so on in the 1990s. During the corporatisation process of Chinese SOEs, managers were empowered with the 'broad authority to use and dispose of the property entrusted to them by the state for management and business purposes' (Broadman, 1995, pp. 26-27), involving autonomy in procurement, production and price-setting, and accountability for profits and losses, as well as discretion to close down or declare bankruptcy. In order to improve the operating efficiency and competitiveness of SOEs, boards of directors were set up for the purpose of effective corporate governance to replace the traditional government control over business operations, and new owners such as individual minority shareholders, employee shareholders and institutional investors emerged. Until the early 2000s, the majority of large SOEs had completed the corporatisation process and were listed on domestic or even foreign stock exchanges; for small-and-medium SOEs, most of them had to sell their shares to insiders such as managers and employees to realise corporatisation and ownership diversification (Tenev and Zhang, 2002).

The market-oriented reforms in the 1990s, mainly based on corporatisation and ownership diversification, created 'economic entities with a relatively high degree of autonomy that are subject to significant market pressure and whose capacity to decide and structure the parameters of their mutual interactions are growing' (*ibid*, 2002, p. 1). According to McMillan and Naughton (1992), the success of the market-oriented reforms in China was subject to several conditions: massive entry of non-state enterprises; introduction of competition among SOEs and

non-state sectors; and improvement of SOEs' performance with state-imposed market-like incentives. This process marked 'a shift of economic power towards households' (*ibid*, p. 131).

The transition from a planned economy to a market economy in China during this period, with even more large scale and deeper influence than the transition from a neo-democratic economy to a planned economy during the 1950s, brought about dramatic changes to China's politico-economic system, manifesting not only in the economic structure, but also in the changes in political sectors. In 1998, the SPC was renamed by the Premier, Zhu Rongji, as the State Development Planning Commission (SDPC), which focused more on macroeconomic management and strategy development, rather than direct intervention in micro-level business activities. In 1999, a decision of making a 'strategic adjustment' in the state-owned sector by 'withdrawing what should be withdrawn', was made in the Fourth Plenary Session of the 15<sup>th</sup> Central Committee of the CPC, which marked significant progress in building market institutions during the market-oriented reforms (Tenev and Zhang, 2002). In 2003, under the direction of the Premier Wen Jiabao, the SDPC, through merging the State Economic Restructuring Commission (SERC) and the State Economic and Trade Commission (SETC), was reorganised into the National Development and Reform Commission (NDRC). Since then, the term '*planning*' has completely disappeared from the national macro-control departments in the Chinese central government, which declared to the world that China was no longer adopting a centrally planned economy (Chow, 2011). In 2008, the NDRC transferred certain functions concerning the industrial sector to a newly established agency, the Ministry of Industry and Information Technology (MIIT), which had more independence to develop industrial standards and regulations, and implemented macroeconomic regulations and controls through cooperation with the Ministry of Commerce (MC).

In short, it is reasonable to conclude that China's reform of transiting from a planned economy to a market economy was remarkably successful, generating far-reaching impacts on the national economic system (Dacosta and Carroll, 2001; Guthrie, 2003; Hou, 2011; Liew, 1995; McMillan and Naughton, 1992; Sachs and Woo, 1994; Zhang and Liu, 2009). With the introduction of a market mechanism, the central state began to pay attention to the green competitiveness of SOEs within an increasingly open market. The environmental governance issue was formally contained in the agenda of the central state in the mid-1990s. In 1995, the Fifth Plenary Session of the 14<sup>th</sup> Central Committee of the CPC issued the '*Ninth Five-Year Plan for the National Economy and Social Development*', particularly strengthening the transition from the extensive economic

growth model to the intensive growth model. In 1997, the *15<sup>th</sup> National Congress of the CPC* identified ‘sustainable development strategy’ as one of the core strategies for socialist modernisation, and strengthened the significance of protecting natural resources and the environment. In 2002, the *16<sup>th</sup> National Congress of the CPC* confirmed ‘continuous improvement of capacity for sustainable development’ as one of the key goals of building a ‘moderately prosperous society’ (Li, 2008).

### **5.2.2 Multiple Models of Varieties of Capitalism in a Market Economy**

According to McCann (2014), China’s politico-economic system contains multiple tactics and models, and the literature is also contradictory: Oi (1995) regards China’s system as a kind of ‘local state corporatism’; Brandt and Rawski (2008) view China as being on its way to an ‘open and globalised capitalist system’; Schweinberger (2014) describes the contemporary Chinese model as one of ‘state capitalism’, which is one of the main impediments to China’s further sustained growth; Huang (2008, 2010) treats China as a ‘totalitarian state’ which rejects free markets and entrepreneurialism; Johnson (2002) utilises a ‘soft totalitarian state’ to depict the Chinese economic model, explaining the one-party state political model in China; Garrick (2012) points out that the party-state plays a dominant but far from exclusive role in its ‘market socialism’ system. Therefore, many scholars claim there was not a ‘real model’ in China’s mind during its reform process over the past three decades (McCann, 2014, p. 287).

In fact, the recent historical story of China’s economic development can help to identify the model of China’s current regime. Starting from the foundation of New China in 1949, the central state displayed an urgent desire for rapid economic growth. In order to greatly improve industrial productivity, a ‘big push industrialisation’ policy was implemented. In the 1950s, since agriculture made up 70% of the national economy, and it was difficult to extract much wealth from farmers via taxation, the state purchased agricultural products from collective farms at extremely low prices to divert funds towards developing heavy industries. The state also tried to lower the costs of urban industrialisation, through adopting the lowest interest rates, providing the lowest wage levels, and paying the lowest prices for inputs; accordingly, the state set prices for all goods at very low levels. As a result, the demand for products was far greater than supply, leading to a serious shortage of many products (McCann, 2014, p. 278). Although achieving an ‘advanced form of state capitalism’ was subject to certain dreadful inefficiencies, it did help China to achieve tremendous economic growth with ‘average annual growth of 4.2 percent in per

capita GNP' from 1950 to 1975 (Brandt and Rawski, 2008, p. 5). However, the Chinese command economic system was operated with a considerably lower degree of centralisation and was influenced by a jumble of authority relations, which diverged greatly from that of the Soviet Union (McCane, 2014; McNally, 2012). This finally led to local planning administrators having much more practical power than central planners, causing low efficiency of the central planning. Industrial enterprises lost managerial autonomy and many of them were controlled by local governments. In the planned economy, under rigid politico-economic control, there were no real labour markets (McCann, 2014, p. 279).

In order to overcome the limitations of state capitalism under a command system, since 1978, China has engaged in a protracted and impressive reform for market-driven changes and further liberalisation, which were gradual at first, then increasingly radical, and have even lasted to the present day (McCann, 2014). Deng Xiaoping's Reform and Opening-up policy of 1978 impacted nearly all areas of Chinese society, including the domestic political system, foreign affairs, and especially the entire economic structure (McCane, 2014; McNally, 2012). The first major economic change was to introduce new policies with market consideration into rural areas. Farm households were allowed to contract agricultural land to plant and cultivate, but the peasantry had to 'sell' a certain amount of cultivated crops to the state at very low prices or even give them away for free. Great progress was also made in the rural industry: TVEs emerged and developed across the country to fill niches in demand, and they began to compete with existing SOEs (Svejnar, 2008, pp. 79-80), although in the early stages after the 1978 reform, TVEs still featured as collectives, mostly involved in central planning activities (McCann, 2014); and as late as 1988, it was still illegal for private firms to have more than eight employees (Bardhan, 2010). In order to spur market awareness, to develop urban and rural collective industries, and to promote the efficiency of the state sector, in 1979, the state implemented a 'dual track pricing system' to coordinate the market and plan in an awkward way: market prices were only applied to production beyond the plan quota; while the planning apparatus still dominated prices and strategies for the majority of corporate activities. To be more specific, for example, once a producer satisfied the basic requirements for collective purposes, he could 'distribute after-plan residuals at increasingly flexible prices' (Brandt and Rawski, 2008, p. 10; Knight and Ding, 2012, p. 47). At the same time, SOEs were given increased managerial autonomy to develop strategies and retain profits (McCann, 2014).

In October 1992, at the 14<sup>th</sup> National Congress of the CPC, the 'socialist market economy' was

officially endorsed to extend the market incentives to all economic sectors. This was Deng Xiaoping's last but one of his most important 'decisive personal interventions in Chinese policy-making' before his retirement (Naughton, 2007, p. 100). After that, reforms in China focused more on market-driven mechanisms, such as dramatic downsizing of SOEs and mass redundancies in state-owned industry, as well as massive expansion of international economic activity (Knight and Ding, 2012; McCann, 2014). With the government's gradual decentralisation of power in terms of business, since the mid-1990s, China's coastal regions, known as the Special Economic Zones (SEZs), have begun to incorporate huge overseas investment and attract internal migrant workers across the whole country (McCann, 2014). At the same time, TVEs' privatisation process has transformed most of them into private SMEs (Huang, 2008). The most dramatic changes of the corporatisation process of SOEs have been manifested in some of them going bankrupt due to years of financial trouble, while the majority of the rest transformed into 'modern enterprises', and the remainder were eventually sold off to new investors (McCann, 2014, p. 292). However, regarding industries with strategic importance, such as the power and energy industry, the petrochemical industry, the communications industry, the steel and iron industry, banks, arms, and so on, the central government has always maintained ownership and control over them.

Therefore, based on a historical perspective, McCann (2014) points out that China has been engaged in an unfinished project which continues to evolve. China's current emergent capitalism shows the duality of institutional diversity: a state-dominant form of capital accumulation based on large SOEs dominating the economic lifeline; while a vibrant network of private entrepreneurs forms the bulk of the private sector (McCann 2014; McNally, 2012). With a gradual transformation from a government-led development model to a market-oriented economic model, China's contemporary economy, on the basis of its particular historical, political and economic trajectories, can be seen as 'a combination of many models and systems', and a mixed economy of state, semi-state actors such as collectives and TVEs, and private actors (McCann, 2014, p. 295).

Compared with the impressive reform of the economic system, the changes in the political system were not obvious. According to Brandt and Rawski (2008, p. 16), China's traditional politics addressed the 'government of men' rather than laws, leaving impressive influences even on modern society. Until now, lower level governments and individual officials are required to deeply understand the central guidelines to clearly define what to do and what to avoid, and

periodical discussions on the guidelines are organised to facilitate a better understanding of instructions from top leaders of the CPC. Johnson (2002, p. 154) points out that all Asian capitalist developmental states can be featured as ‘soft authoritarian governments’, which constrain freedom of speech of the press and the populace and restrict the impacts of public opinion on the government; and the central state in China regards ‘authoritarian rule’ as ‘indispensable’ to national growth. In 1982, workers’ right to strike was even removed by Deng Xiaoping from the Constitution, in order to prevent labour unrest caused by the gradually abolished system of guaranteed lifetime employment, protected by the institutions of *danwei* (enterprise in English) (McCann, 2014). The CPC has been committed in maintaining economic growth and promoting China’s international status, in return for ‘public acquiescence to its autocratic rule and anachronistic ideology’ (Brandt and Rawski, 2008, p. 17). Most Chinese citizens seem to have accepted this, or at least have accommodated themselves to such a political economy, resting on a ‘grand but unspoken bargain’ between the CPC and Chinese civil society (*ibid*, p. 17; McCann, 2014). In the context of the steady collapse of the traditional state socialist system and the gradual emergence of new market-oriented legitimacy in China, Naughton (2007, p. 100) concludes that Deng’s legacy features ‘an unbalanced combination of vigorous economic reforms and relative political stagnation’, due to the lack of Western traditions of civil society, individual rights, impersonal trust, and public-private division (Hsu, 2007). In recent years, with a gradual relaxation of Party control on public discourse, the activism of NGOs in China has been gradually emerging and flourishing to effect certain changes of hegemonic relations between the state, capital and civil society in particular ways in China’s modern environmental governance system.

### **5.2.3 Civil Society in China’s Varieties of Governance**

Compared with the impressive reform of the economic system, the goal of the political reform was to maintain and fine-tune the existing regime, in order to accommodate and neutralise the conflicting demands in a gradual manner in China (Brandt and Rawski, 2008; Shi et al., 2014). Since the reform era promoted the emergence of new market-oriented legitimacy in China, the private sector has been gradually embedded in the state’s political advisory and legislative bodies politically, especially in terms of their power of negotiating with local governments. In the process of seeking strong social support, the state in China still acts as the ‘dominant and overarching force leading China’ (McNally, 2012, p. 184), and secures a soft-authoritarian regime. Thus, China’s current politics also contain considerable divergences and great



uniqueness, and its distinct historical-geographical heritage leads to a further layer of variation in its governance regime.

Since the 1990s, with the gradual relaxation of state control over public discourse, the environmental awareness of Chinese civil society has gradually improved (Ho and Vermeer, 2006; Lan et al., 2006), and civic NGOs have been emerging and developing significantly in terms of number, scope, capacity and impacts. Since the mid-1990s, civil society studies in China have emerged. However, the idea of civil society, derived from Western historical experience, seems to be problematic as a way of understanding social changes in Chinese society, which is integrated with different institutional foundations, historical trajectories and social characteristics (Saich, 2001). The western conception of civil society connotes the development of a public-social sphere independent from the state (Heberer, 2012). According to Metzger (1998), within a Western context, civil society is related to bottom-up movements based on citizens and their interest organisations, and related to the development of a sphere autonomous from the state and a non-utopian worldview. However, under the complex of the Chinese politico-economic system, the notion of civil society cannot be simply conceptualised as a democratic force of ideological struggle, but should be understood based on the particular historical and political experience of China, to ‘fit Chinese empirical pegs into Western theoretical holes’ (Saich, 2006, p. 60). In the modern state-building and institution-building process in China, the state has always exerted an overpowering control and subsequent monitors to restrict the Chinese citizens’ activities (Heberer, 2012), resulting in a deficiency of civil liberties in China. Within the Chinese ‘strong state-strong society’ (Tang, 1996), or a ‘quasi civil society’ (He, 1997), or a ‘state-dominated civil society’ (Frolic, 1997), the state always acts as a political architect to construct the structures of the weakly developed civil society and the strongly established state (Migdal, 1998).

Under the Chinese soft authoritarian governance regime, NGO activism, as the only legitimate means to effect transformative movement of the democratisation process in China, has become an exclusive channel for the public to struggle for hegemonic power in China. The fragmented ruling system and complex administrative levels, including provincial level, prefectural level, county level, township and village level local governments, formerly kept information locally, so that many central plans and administrative provisions to address social needs could not be conveyed and consistently implemented from the central state to the lower levels of government; similarly, many regional social problems and contradictions could not be completely reported to

the central state; which might cause different degrees of grievances among the public and harm social stability. For this reason, NGOs, from the grassroots perspective to satisfy social needs, fulfill social responsibilities, redress public grievances and promote public participation, have gradually become tolerated by the state in China's state-dominated society (Lee et al., 2012; Spires, 2011; Yu and Guo, 2012).

According to Huang (2013), the gradual relaxation of the state's control over people's day-to-day lives has spurred the development of NGOs to build China's nascent civil society. Especially after some seriously natural or manmade disasters, the Chinese state emphasises more the operations of grassroots organisations to assist in handling emergencies. To satisfy these social needs, especially with the deepening of liberalisation policies after the 1990s, NGOs focusing on the public welfare, social betterment, education, and local self-defence are widely established, which are mainly sponsored by local elites, with international aid in some cases. With more and more societal demands emerging, NGOs have gradually gained footholds, shaping a trajectory of civil society development in China. The flourishing of NGOs, via involvement in public affairs and even in business activities through particular methods, promotes the development of Chinese civil society; while at the same time, NGO activism is greatly impeded by government restrictions, incompetence, and lack of trust (Chen, 2010; Yang, 2003). The state tries to integrate the existing NGOs into bargaining processes, but strictly controls them, and prevents them acting autonomously from the government (Heberer, 2012).

#### **5.2.4 Change of the State's Environmental Attitudes**

With the deepening of the reform and opening-up, the CPC realised the productive forces lagging behind Western countries were mainly manifested in labour-intensive means of production, low-quality labour, poor technical levels, high energy consumption, huge resource waste, and heavy environmental pollution under the extensive economic growth model. To further develop China's productive forces to fit the 'advanced form of state capitalism' and achieve the 'socialist market economy', environmental issues have officially been put on the agenda of the central state.

After the Reform and Opening-up policy of 1978, a huge influx of SMEs in extractive industries increased the prominence of resource and environmental pressures. As China's economy gained momentum based on reckless expansion of production, industrial pollution spread rapidly

nationwide (Ho and Vermeer, 2006). With more open minds to the societal influences on public affairs and increasing environmental awareness of Chinese citizens, the environmental issue has become one of the most prominent triggers of intensifying social conflicts between civil society, business and government agencies. Environmental degradation and the corresponding social disharmony have become one of the biggest challenges to China's growth. Confronted with a sharp rise in soil, water and air pollution and the corresponding growing discontent of the Chinese citizens, in order to improve the living environment to benefit residents' health and reassure the public, the central state proposed the concept of 'scientific development' in 2003, through which environmental protection was set as a critical factor to socio-economic development, and as a test of how well the state can serve the people and build its capabilities (Lan et al., 2006). Furthermore, with the deepening of opening-up, especially after China's access into the WTO in 2002, China has been widely criticised as one of the largest greenhouse gas emitters in the world. Facing strict international standards and heightened international pressure, China has begun to elevate the importance of environment protection in developing the national development strategy, in order to construct an environmentally harmonious society to mitigate criticism at home and abroad.

Since the state has realised that certain collective activities in the public environmental arena ought to involve social organisations, the existence and activism of green NGOs have been tolerated to a certain extent. The first grassroots green NGO in China, Friends of Nature, was established in 1993 (*ibid*). Different from those in Western countries, civic green NGOs in China are 'primarily initiated and run by a few dedicated individuals'; thus, most of them lack widespread societal support (Tang and Zhan, 2014, p. 197). Since the 2000s, with the deepening of reform and opening-up, the state has been increasingly tolerant to civil society's participation in environmental monitoring. In 2003, the '*Cleaner Production Promotion Law*' was issued, which encouraged public participation in environmental monitoring, and required relevant authoritative institutions to disclose environmental information on the media, securing for the public the right to know about corporate pollution activities and local environmental conditions. Yang (2005) suggests that environmental NGOs, functioning as both sites and agents of politically democratic change caused by environmental movements, have begun to help local governments to monitor corporate behaviour from a grassroots perspective, and encourage and persuade corporations to focus on their environmental performance. Civic environmental NGOs, with a largely non-oppositional stance towards government, have made limited but inspiring progress in affecting environmental decision-making, and have increasingly negotiated with the

different levels of government institutions in defining their precise role in the Chinese political process (Tang and Zhan, 2014).

### **5.3 Environmental Governance of China's Rare Earth Industry under a Market Economy**

Based on the illustrations of the discourse of the Chinese economic transition from a planned economy to a market economy in Section 5.2.2, with ever more concerns over sustainable development and the green performance of the business sector from the central state as shown in Section 5.2.4, this section focuses on the changes in the discourses of hegemonic positions of government agencies, corporations and NGOs as well as their hegemonic struggles in the environmental governance of the rare earth industry under China's market economy after the 1990s, with a case study on BSRE. By following the three-dimensional analysis of CDA, first of all, mainly based on the transcripts of interviews with the government, corporations and NGOs, Section 5.3.1 carries out a textual analysis to appraise the genres and styles of the environmental governance of China's rare earth industry under the market economy. Following a textual analysis, a process analysis is carried out in Section 5.3.2, combining the different textual elements to discuss the industrial consolidation of China's rare earth industry in pursuit of sustainable development and green growth in a holistic manner. Finally, a social analysis is conducted in Section 5.3.3, from a wider perspective of political discourses, to discuss the changing hegemonic struggles among government agencies, corporations and NGOs within the context of China's contemporary varieties of environmental governance based on a series of contested issues over the environmental domain in China's rare earth industry.

#### **5.3.1 Description of the Changing Positions of Government, Corporations and NGOs: A Textual Analysis**

##### **5.3.1.1 An Overview of the Changing Hegemonic Positions**

With a gradual transition from a planned economy to a market economy, as illustrated in Section 5.2, China has gradually set out on the road of intensive economy growth, in place of the traditional extensive growth pattern. The central state has realised the significance of sustainable development, and has started to emphasise the environmental performance of the high-consumption and heavily-polluting industries. With ever more concerns over the green

performance of SOEs from the central state, the roles of local governments and local SOEs in environmental governance have changed, taking BSRE for example:

*In the planned economy, we [the Baotou government] were responsible for governing environmental pollution of BSRE. After its corporate reform, we were no longer the shelter for its losses due to the environmental damage. We are only exercising guidance and supervision over BSRE to improve its green performance. (GOV1, Extract 2.1)*

*In the planned economy, we [BSRE] only needed to follow the central instructions to engage in mining and processing without any consideration of environmental cost. ... [A]fter the corporate reform, we began to consider our green competitiveness, responding to regulatory pressure from governments, market pressure from investors and customers, and social pressure from green NGOs. (COM3, Extract 2.2)*

Since the early 1990s, with a relaxation of state control over economic structure and ultimately public discourse (Saich, 2001), grassroots green NGOs have emerged in China. The rise of civil society in the Chinese context, mainly exemplified and embodied as NGOs with aims to promote public participation, political transparency, government integrity and efficiency, and democratic and scientific decision-making, has gradually attracted more academic attention regarding the study of the changing governance model in China (Yu and Guo, 2012). NGOs, as a new phenomenon in post-Mao China, have developed significantly in terms of number, scope, capacity and impacts since the 1990s. As illustrated in Section 5.2.3, the fragmented ruling system and complex administrative levels formerly kept information locally, so that many central plans to address social needs could not be conveyed and consistently implemented from the central state to the lower levels of government, which caused certain grievances against the central state's governance; similarly, many regional social problems and contradictions could not be completely reported to the central state; which might cause different degrees of grievances among the public and harm social stability. For this reason, grassroots NGOs, with missions to satisfy social needs, fulfil social responsibilities and redress public grievances that the government cannot do well, have gradually been tolerated more by the government and allowed to survive in China's state-dominated society. In recent years, with increasing opportunities for green NGOs to monitor and disclose corporate activities via the mass media from a grassroots

perspective, corporate environmental information disclosures have been ever more transparent for both the state and the public in China.

*Relying on the power of the mass media, green NGOs like us, under government supervision, are playing an increasing role in facilitating collective action and balancing power between government and business in environmental governance. (NGO7, Extract 2.3)*

From *Extracts 2.1, 2.2 and 2.3*, it can be seen that changes of the politico-economic system led to great changes in the roles of the three entities in China's environmental governance: the government has changed its hegemonic position from a manager or governor to a supervisor or planner, to guide and supervise the improvement of corporate green performance, especially for those in heavily-polluting and resource-based industries, to transform their traditional extensive production model with fewer environmental concerns to an intensive production mode considering sustainable development; the corporation has had to place more focus on green competitiveness, responding to pressures from government agencies and other stakeholders; green NGOs, on the basis of the increasing influence of the mass media, have gradually played a more visible role in balancing the power of the state and capital in China.

### **5.3.1.2 Genres of Texts: Government Supervision**

#### **5.3.1.2.1 Supervision of SOEs**

The period before the 1990s in China was a typical 'big-government' era, during which central planning had always strictly controlled economic activities across the country and SOEs had dominated the economic structure in China's state capitalism. In the 1990s, with the central state's instruction to implement corporatisation of SOEs, a modern enterprise system and private investors have gradually emerged within the SOEs. For BSRE, in order to proceed with its corporatisation, the Baotou government has attempted to attract more investment from private business entities, transforming the original government holding of shares to joint ownership. In 1997, by attracting more than ten private investors to realise the equity reallocation within BSRE, Baotou Steel Rare Earth Hi-Tech Company Limited was established to be listed on the Shanghai Stock Exchange, which brought about a series of great changes to BSRE:

*I think the biggest change was that the group [BSRE] realised the equity reallocation: our shareholders were not limited to the local governments, but involved many private business entities. As a result, for corporate governance, we obtained enough managerial authority, and became a relatively independent economic entity from the local governments from then on. (COM4, Extract 2.4)*

Independent from the strict control and direct intervention of the local governments, the corporate decision-makings in BSRE were now made by the newly established board of directors; the managers were no longer assigned by the local governments, but directly appointed by the board of directors, and involved in sharing corporate benefits or undertaking losses; the employees no longer had lifetime employment positions but began to compete for contract positions. With the introduction of market mechanisms into staff recruitment, problems such as absence of positions or virtual positions within the old organisational structures have been eliminated; the old and rigid staff classification system and wage distribution system have been eradicated, and the modern human resource management system and incentive system have been established. However, although all the SOEs in the Chinese rare earth industry had completed corporate reforms by the end of the 1990s, through attracting more private investors to become involved in corporate governance, they have maintained a strong state-owned overtone in nature. A government officer explained this as follows:

*It is no doubt all rare earth ores are the national property. As one of the most valuable and strategic natural resources, rare earths' mining and processing as well as exporting should be always under strict macro control of the government. For example, at present, it is regulated by the central state that the rare earth ores can only be mined by three authorised rare earth SOEs. (GOV2, Extract 2.5)*

As a worldwide phenomenon that many key industries including extractive industries are either directly or indirectly controlled and monitored by the state, China's rare-earth industry has always been regarded as the key national strategic asset, and the state plays more of a key role than in other industries. Therefore, after the corporate reform of BSRE, although the decision-makings in terms of daily business operations were no longer made by the local governments, the Baotou and Inner Mongolia governments have still been the two largest shareholders of

BSRE and own BSRE. The local governments, at the current stage, supervised BSRE's business activities strictly, but '*decentralised the management power to the corporate level*' (COM3). Here, decentralising management power to the corporation means that managers in SOEs have more managerial autonomy in corporate governance. The government officers also describe the changing role of the local governments in the corporate governance of BSRE after its corporate reform:

*Since the early 2000s, both the Baotou government and the Inner Mongolia government have changed their roles from managers to supervisors in BSRE's governance. (GOV2, Extract 2.6)*

Therefore, for the business sector, the genres of the discourse of China's current varieties of governance have transited from highly descriptive plans to government supervision, owing to the corporatisation and ownership diversification of SOEs since the 1990s. Government supervision of SOEs, as a new way of acting, measures 'a success for social stability and economic development' (Zhang, 2013).

For environmental governance of the rare earth industry before the SOEs' corporate reform, from *Extracts 1.1, 1.8 and 2.1*, it can be concluded that the local governments were fully responsible for cleaning up all environmental mess caused by BSRE, and BSRE was committed to improving productivity and increasing output without any consideration of environmental cost. Such an extensive growth model caused serious environmental damage to the local environment. As illustrated in Section 1.1.2 and Section 4.2.3, Baotou's rare earth industry has brought about hundreds of heavily polluted rare earth tailings dams and seriously poisoned local farms and villages. Stepping into the new era of green growth, with the central requirement of transforming the traditional extensive growth pattern to an intensive growth pattern, the question of how to realise the sustainable development of China's extractive industries has been formally put on to the agenda of the central state. After the nationwide corporate reform, according to '*Consult on Establishing the Chinese Nationwide Rare Earth Groups*' released by the SETC, since the 2000s, '*the route of pursuing output-maximisation and profit-maximisation at the expense of environment in Baotou has been approaching a dead end*' (The State Economic and Trade Commission of the PRC, 2001). With more focus from the central state placed on the environmental performance of the Chinese rare earth industry, the new genres of discourse of



China's environmental governance under the market economy also turned out to be government supervision. Taking BSRE as an example:

*We [BSRE] have to accept the periodic environmental monitoring from the different levels of environmental protection authorities, such as BEPB, Inner Mongolia Environmental Protection Bureau (IMEPB), and the MEP of the central government. We should strictly comply with waste-emission regulations and energy-conservation plans developed by the MEP, in order to meet all the national environmental standards. (COM5, Extract 2.7)*

For environmental governance of the rare earth industry, the central state develops various green indicators on resource mining, energy consumption and waste emission, to standardise and restrict corporate behaviour. In order to implement these indicators, the regulatory institutions and monitoring authorities at different levels of local government are required by the central state to undertake periodic inspections of local business activities. Owing to the complex geomorphology and regional environment in China, the MEP has to cooperate with local EBPs to strengthen environmental regulations (Galarraga et al., 2011; Harashima, 2000; Lo et al., 2001). Thus, the genres of environmental governance under China's multiple model of VoC can be viewed as 'government supervision', and local environmental protection bureaus (EPBs) become the most important actors for carrying out targeted environmental projects to help local business improve environmental performance.

#### **5.3.1.2.2 Supervision of NGOs**

As stated by Gramsci (1971), civil society stands between the state and the capital. NGO activism in China, as a new phenomenon, emerged in the 1990s, and has been regarded as the most important way to promote the development of civil society and the only legitimate way for the public to participate in public affairs. Under the Chinese soft authoritarian regime, the state has always shown contradictory attitudes towards NGO activism: the government recognises that NGOs can provide certain social services for local residents better than the government can, to a certain extent; but the fear and suspicion of NGO activism challenging governmental authorities has resulted in the government's strict control over NGOs' activities (Lee et al., 2012; Li, 2011; Spires, 2011). In order to standardise NGOs' activities and restrict their power, as early as 1989, the State Council of the PRC issued the *'Regulations on Registration and Administration of*

*Social Organisations'* (1989 Regulation for short), which regulates that: any candidate that intends to register as a legal NGO in China must firstly obtain sponsorship of a government institution, so as to regulate, organise, and monitor its activities; then with the approval of its sponsor, the departments of civil affairs in local governments could decide whether an applicant can be registered legally as a NGO, based on a set of financial, geographic and membership requirements. The governmental sponsors also need to monitor NGOs' activities, conduct annual reviews, write annual performance summaries, regulate illegal activities of NGOs and facilitate investigation from other government institutions (The State Council of the PRC, 1989).

*The 'dual administration system' has been widely considered as the largest legal barrier for the grassroots associations to register as legal NGOs. (NGO5, Extract 2.8 - 1)*

*The [dual administration] system has been the largest legal obstacle for a vibrant civil society to consolidate. (NGO6, Extract 2.8 - 2)*

Therefore, although NGO activism is widely regarded as the only legitimate means to effect transformative movement and the exclusive channel to build China's nascent civil society in China's democratisation process (Huang, 2013), such a 'dual administration system', as *Extract 2.8* proved, has been the biggest legal barrier for the green NGOs to act autonomously from the state and for more vibrant civil society to consolidate. As a result, many NGO candidates in China are unable to obtain an appropriate governmental sponsor to support them to register legally, and there are much more unregistered than registered social organisations engaged in various civil affairs (Beja, 2006; Howell, 2012; Huang, 2013; Spires, 2011; Unger, 2008). With the surging number of unregistered NGOs emerging across China after the mid-1990s, the State Council of the PRC revised the *1989 Regulation*, and issued the '*1998 Amendment on Regulations on Registration and Administration of Social Organisations'* (*1998 Amendment* for short). According to the *1998 Amendment*, departments of civil affairs have rights to stop the projects carried out by 'illegal social organisations' (The State Council of the PRC, 1998). However, it is obviously unsustainable or even impossible for local governments to handle such a huge amount of 'illegal' activities carried out by massive numbers of unregistered social organisations. By 2010, there were more than 420,000 civil society organisations registered in China, and the number of non-registered grassroots social organisations was estimated to be anywhere up to eight million. The unregistered NGOs have engaged in various fields such as

technology, education, culture, health, labour, environmental protection, legal service, social service, countryside economy, poverty alleviation and so on (Huang et al., 2013). Thus, there was much criticism of the suitability and legitimacy of the *1998 Amendment* (Li, 2011).

At the current stage, Chinese decision-makers are still at a crossroads regarding the rapid development of NGOs. What they can do is either revise the *1998 Amendment* to satisfy the latest social needs and foster NGOs' development through relaxing the strict registration requirements, or leave the *1998 Amendment* as it is, which may postpone the resolution of the legal legitimacy of a large number of social organisations and increase tension between NGOs and governments (*ibid*). According to Ge (2010), due to the recent escalation in China's political conservatism, it may not be possible to amend the *1998 Amendment* in a short time. However, in recent years, the Chinese government has tolerated most unregistered NGOs' existence in practice, focusing more on the legality of NGOs' activities rather than the legality of NGOs themselves, which has left a broader space for the gradual expansion of NGOs in Chinese civil society.

Since environmental problems have been a new crisis of governance, the activism of environmental NGOs in China has provided the most important material for studying the potential of civil society in China's environmental governance (Yu and Guo, 2012). In China, the assessments of local governments' contributions are determined by their 'achievements', which are mainly manifested in social stability, economic growth, and sustainable development. Therefore, certain NGOs that can help local governments to improve their achievements directly, such as foundations providing educational subsidies, charities concerned with street children and orphans, as well as helping patients with incurable diseases, can carry out activities within a relatively relaxed political environment; while the other NGOs, with aims to expose local problems such as environmental pollution and labour rights violations, usually survive in a tough environment with strict government restrictions. Even for the registered environmental NGOs, their green activities against local environmental pollution have always been strictly monitored and constrained by the local authorities. The fact is that local governments were far more motivated to protect local business which could create job opportunities and promote local economic growth, even though they did not strictly uphold environmental statutes (Lee et al., 2012). The different interests of internal government agencies will be further discussed in Section 5.3.3.1. As a result, environmental NGOs in China, shaped by various constraints, are

less successful in influencing government decisions and corporate behaviour in practice, than their counterparts in Western countries (Tang and Zhan, 2008).

*Due to the political trajectory of state-dominated society as well as the historical root of local business protection in China, our fighting against industrial pollution problems is strictly constrained by the local authorities. (NGO8, Extract 2.9)*

Extracts 2.8 and 2.9 show that in the context of a ‘state-dominated civil society’ in China, the state integrates the green NGOs into bargaining processes, but strictly bans them from acting autonomously from the state. Thus, within the Chinese context, the potential of green NGOs in environmental governance has been largely restricted.

In recent years, with ever stricter environmental requirements from the central state, green NGOs, relying on the increasing influence of the mass media, have been more actively involved in environmental monitoring of industrial pollution. Nowadays, the assessments of local governments’ achievements are not only determined by social stability and economic growth, but also closely related to sustainable development. Green NGOs, to a certain extent, can provide more timely and accurate information on local environmental situations, and help local environmental authorities to prevent sudden occurrences of irreparable environmental problems.

*We are exercising multiple non-point sources monitoring of the local environment and committing to reporting environmental damage in a timely manner to local EPBs before irreversible environmental consequences emerge. (NGO3, Extract 2.10 - 1)*

*Our environmental monitoring reports have gradually come to be considered by local governments. (NGO7, Extract 2.10 - 2)*

In order to improve the efficiency of environmental monitoring, the different levels of local government have begun to consider the monitoring reports from the local green NGOs. However, with the concern that radical movements of green NGOs may challenge the local authorities and affect the enthusiasm of local investments, green NGOs are still regulated under local governments’ dual administration system. Within such a context, it is reasonable to conclude that

the genres of environmental governance between the governments and NGOs should also be government supervision.

### 5.3.1.3 Different Styles of Texts

In this section, focusing on the different ‘styles’ of the discourses presented by the different interviewees within the researcher’s fieldwork, an illustration is provided of how the interviewees express their different opinions on environmental governance and articulate their different roles according to their different positions. The interviewees from government, corporations and NGOs have different emphases when they illustrate their conceptions of environmental governance as well as their changing roles in China’s environmental governance after the nationwide corporate reform. Certain typical extracts of transcripts of interviews with distinctive personal standpoints are selected as follows:

#### *The Governmental Perspective*

*Environmental governance is a relatively new term to China. In my viewpoint, it should be an integrated system involving tireless efforts from the state and business. Also, it is closely linked with the flourishing of green NGOs. These participants should act together to build an effective environmental governance system. (GOV3, Extract 2.11 - 1)*

*I believe we are playing an important role in guiding, regulating, monitoring and supporting Baotou rare earth industry in terms of improving its green performance. The mining chaos in the 1990s left more than 180 million tons of toxic mine tailings, covering more than 10km<sup>2</sup>. We should take the lead in the remediation of the pollution. (GOV1, Extract 2.11 - 2)*

*After corporate reform, we think BSRE should play an increasingly active role in environmental governance. ... BSRE should have more environmental concerns and focus to exercise strict controls over the emissions, in order to stop the pollution forever. Anyway, any repair of further environmental damage caused by BSRE should be undertaken by itself. (GOV2, Extract 2.11 - 3)*

*NGOs play an active role in monitoring environmental pollution. We believe they can provide useful green suggestions to government agencies and corporations. (GOV3, Extract 2.11 - 4)*

#### *The Corporate Perspective*

*In my opinion, environmental governance of the rare earth industry depends on the continuous improvement of government regulations, since the government still plays a primary role in guiding and supervising the whole system [of environmental governance]. (COM1, Extract 2.12 - 1)*

*Establishing an efficient environmental governance system in the rare earth industry requires a huge amount of financial investment and technical inputs, which cannot be undertaken by us [BSRE] or any SOE alone. ... We believe the local governments should play a more active role so that we can cooperate with them to carry out more environmental projects. (COM3, Extract 2.12 - 2)*

#### *The NGO's Perspective*

*Environmental governance should be multi-level plus multi-actor, where governments, corporations, and NGOs like us can play different roles. Every actor is indispensable and irreplaceable. (NGO5, Extract 2.13 - 1)*

*... [A]lthough the media is not strictly regarded as a part of governance, it has been the most important means for us to express the green appeal. (NGO8, Extract 2.13 - 2)*

*With the assistance of the increasing influence of the mass media, it is possible for us [environmental NGO] to play an active role in environmental monitoring and governing, by means of developing different 'strategies and skills' towards environmental vandalism of business. (NGO7, Extract 2.13 - 3)*

*We are ... supervised by local governments ... but help them [local governments] monitor local pollutants. ... We also act as a partner to help*

*some far-sighted corporations to improve their green images. (NGO5, Extract 2.13 - 4)*

According to the responses from the government, corporations and green NGOs in terms of the environmental governance of China's rare earth industry, it should be clear seen that there are different styles among different interviewees in articulating their different understandings of environmental governance: interviewees from the government address more the corporate initiatives and the increasing importance of NGOs in the modern environmental governance system; interviewees from BSRE indicate the importance of government regulations and supervision; and interviewees from the NGOs emphasise more their increasingly important roles in balancing the power relation between the state and business.

During the interviews with the government officers, the researcher explained the concept of hegemony in a neo-Gramscian framework. The officers completely agree that the theoretical framework from a Western experience with a focus on the increasing roles of non-state actors in governance is also feasible for analysing China's modern environmental governance system, although the power of civil society has still been too weak to directly influence the public decision-makings. The governmental identity constitutes the styles of interviewees from the local government, who have a more plural view on the integrated discourse of environmental governance. According to *Extract 2.10*, although the different levels of government should secure a leading role in establishing an effective and efficient environmental governance system, large SOEs in heavily-polluting industries, which are directly involved in environmental governance, should also play a significant role in societal responses to environmental issues and actively engage in improving their green competitiveness. In addition, green NGOs, under the government's administrative supervision, should help local governments to monitor the local pollutants and promote the local achievement of sustainable development.

From a corporate perspective, it can be seen that BSRE's managers regard government agencies as the most important actors in environmental governance, even after the corporate reform of BSRE. In their opinions, within such a heavily-polluting, high-consumption and resource-based extractive industry, the corporate capability of environmental governing is greatly restricted due to the huge amount of environmental investment. Government agencies should not only develop environmental indicators and supervise their implementation at the corporate level, but also

provide sufficient financial and technical support as well as policy preferences to help the corporations to improve green competitiveness.

Compared with the perspectives of government and business, responses from the green NGOs focus more on their increasingly ‘indispensable and irreplaceable’ role as highlighted by a neo-Gramscian governance framework. In their opinions, environmental governance, as a complex system signifying a broad range of economic, political and social structures, refers to different ways of humans influencing the natural environment, not only involving state actors such as the central state developing macro plans and sub-national actors such as cities, localities and regions deploying their own strategies, but also including non-state actors such as corporations implementing sustainable strategies and NGOs facilitating collective action. The fact is that green NGOs have still been very difficult to behave as equal partners with governments and SOEs in environmental governance in China’s state-dominated governance regime, and their green movements against local industrial polluting activities have always been restricted by the local authorities.

Although the interviewees with different positions expressed their understandings of environmental governance with different emphases, these discursive texts comprise a more comprehensive discourse for the modern Chinese environmental governance system in the market economy within a neo-Gramscian consideration. Environmental degradation in China has been mainly caused by high-speed economic growth and industrialisation, incredible population growth, and strikingly increased levels of consumption. A series of environmental problems, such as climate change, air pollution, water scarcity, forest degradation, soil and land deterioration and biodiversity destruction, have been emerging in China. However, contemporary environmental governance finds it difficult to keep pace with the rapid development of the national economy. With the emergence of the above environmental problems as a global phenomenon, the traditionally centralised command-and-control model no longer works well because of multiple non-point source polluters (Evans, 2012). Therefore, with a shift from government to governance, it is necessary to place emphasis on the roles of the non-state actors in dealing with environmental issues in China. From all the above responses of the different standpoints, together with *Extracts 2.1, 2.2 and 2.3* overviewing the changing roles of three entities, there is a common view that a gradual change towards a neo-Gramscian governance has occurred within China’s environmental governance since the 1990s, although the governance



regime in China's contemporary multiple models of VoC still differs greatly from Gramsci's governance in Western countries.

### **5.3.2 Interpretation of the Industrial Consolidation: A Process Analysis**

#### **5.3.2.1 The First Attempt at Industrial Consolidation from 2001 to 2003**

This section, based on a process analysis, turns to discuss how the different textual elements extracted from interview transcripts, government documents, corporate reports, and media news hang together to produce a complete image of the development of China's rare earth industry and illustrate the different roles of three actors in the process of industrial consolidation, which aims to improve the green competitiveness of the entire Chinese rare earth industry in the global market. *Extracts 2.7, 2.9 and 2.10*, together with *Extracts 2.11, 2.12 and 2.13*, jointly identify government supervision as the new genres of discourse of the environmental governance in the context of a combination of multiple models of VoC in China. Government agencies still play a primary role in guiding, regulating, and supervising corporate behaviour and NGO activism in the modern environmental governance system. As early as 2001, several relevant departments in the central state joined together to implement the rare-earth-mine geological environment restoration and control, in order to promote the green upgrade of the entire industry.

As *Extract 1.2* shows, a large number of SMEs in the mining chaos in Baotou's rare earth industry not only wasted a huge amount of resources, but also caused a series of serious environmental problems. The mining chaos, depicted in Section 1.1.2, has led to the world's largest rare earth production base facing a scattered, chaotic and poor situation. A quote that arose during the interviews, '*rare earth is not earth, but sold with earth's price*' (*COM4*), is the truth of the chaotic rare earth market in China within the 1990s. In the 2000s, reacting to the dramatic growth of global rare earth demands in many industries, the Chinese government realised the importance of rare earths as a kind of strategic resource for China's economic growth and sustainable development. After the completion of corporate reform of the SOEs in the rare earth industry, in 2001, the SETC proposed a two-year plan to consolidate the entire Chinese rare earth industry to two (northern and southern) rare earth groups, in order to maximise the competitiveness of the rare earth industry in China and minimise resource waste and environmental pollution.

*From the mining stage to the deep-processing stage, the whole process should be fully controlled by the limited authorised large SOEs with much stronger economic and technical strengths. (The State Economic and Trade Commission of the PRC, 2001, Extract 2.14)*

According to the central guidelines in terms of industrial integration, the northern and southern rare earth groups would be established on the basis of geographical areas and product categories. The northern group, formally named by the SETC as the China North Rare Earth Group, was designed to consolidate the light rare earth industry in northern China, which was supposed to be dominated by BSRE, and integrated with Gansu Rare Earth Group in Gansu Province and some other backbone enterprises in Sichuan Province and Shandong Province. The China South Rare Earth Group was supposed to focus on the heavy rare earths, led by a large SOE (pending) to consolidate the rare earth enterprises in Shanghai, Jiangsu Province, Jiangxi Province, Hunan Province and Guangdong Province (The State Economic and Trade Commission of the PRC, 2001). For the shareholding structure, the state-owned shares would take up more than half, maintaining a strong state-owned overtone in the governance of the rare earth industry. Such an industrial consolidation would be effective in eliminating mining chaos and strengthening deep-processing (*ibid*). An article published on the largest government portal website in China, *people.cn*, states the importance of industrial integration as follows:

*For such a strategic natural resource, it is quite reasonable for several large SOEs to monopolise, not only benefiting the improvement of industrial competitiveness and pricing capability in the global market, but also being conducive to establishing an effective environmental governance system, on the basis of adequate funds, advanced technology and facilities and experienced professionals. (Du and Wang, 2014, Extract 2.15)*

Therefore, the first consolidation attempt of establishing the northern and southern rare earth groups was regarded as a meaningful attempt by the central state to guide China's rare earth industry towards healthy, stable and coordinated development. In the central state's opinion, BSRE was regarded as the most appropriate SOE to integrate companies in the northern rare earth industry, with huge potential to make better use of limited rare earth resources and minimise environmental damage.

*All rare earth ores in Baotou belong to the state. ... It is sensible for BSRE, the only SOE in Baotou's rare earth industry, to monopolise rare earth mining and processing in Baotou. (GOV1, Extract 2.16)*

According to *Extracts 2.14, 2.15 and 2.16*, respectively selected from government documents, online news and interview transcripts, a consensus can be reached that the rare earth industry in China should always be under the macro control of the central state and operated by the authorised large SOEs. These three extracts provide a discursive implication that industrial consolidation is a better way to ensure further sustainable development of the industry. Following the central instructions, the different levels of local government should play a leading role in this process, and following local authority guidelines, all sizes of corporation in the different regions should actively coordinate for the purposes of industrial consolidation. However, in practice, such an integration plan in the rare earth industry was suspended and eventually ceased in 2003 after two years of effort, due to many 'resistance movements' from the different local governments and rare earth corporations.

Towards the consolidation of the rare earth industry, the strongest resistance, according to the interviewees' opinions, came from the local businesses, which were directly involved in mergers and acquisitions (COM3). First of all, in China's rare earth industry, there were much fewer SOEs than private SMEs, which had survived from the mining chaos in the 1990s. Thus, the integration of other SOEs and private SMEs made it necessary to overcome the cross-ownership issue, which had not been properly handled by the government agencies. In addition, the local private corporations had become the important sources of local economic growth. They were qualified with many local preferential policies under the local governments' protection, so that they were reluctant to be merged as subsidiaries of the large SOEs from other regions, such as BSRE in Baotou; not to mention the resistance of local SOEs which had absolute priority in local businesses facing mergers. Therefore, both private rare earth corporations and SOEs, afraid of losing the protection of the local governments and encountering worse treatments after being merged with large SOEs from other regions, had usually taken opposite attitudes and practices against industrial consolidation. Moreover, there were still many illegal rare earth corporations surviving from the 1990s' mining chaos and they survived outside of the government's control and regulation, which also brought great difficulties for the integration of China's rare earth industry (COM5).

The resistance against the industrial consolidation also stemmed from the local governments. At the beginning of the 2000s, after nationwide corporate reforms, local economic growth was mainly determined by the development of local SOEs as well as local private enterprises. In order to secure local economic growth and improve local achievements, most local governments were reluctant to see their local rare earth businesses being managed or operated by larger SOEs in other regions (GOV1). Thus, such resistance – local protectionism with the different interests left by the old and rigid economic system in China’s planned economy – seriously hindered industrial consolidation across different regions.

Under such a complex situation, without enough pre-mediation and pre-communication between the central state and local governments as well as local enterprises, the first attempt at integration finally failed. In 2010, an article published on *sina.com*, one of the largest Chinese web portals, pointed out that the Chinese political change in 2002 was another crucial reason for the suspension of industrial consolidation. Hu Jintao became the new paramount leader in China in 2002, and with the great change of the central government agencies in 2003, the consolidation attempt of China’s rare earth industry was temporarily suspended.

*The whole integration process of the rare earth industry was always under the strict control of the SETC. In 2003, Hu Jintao’s government reconstructed the SETC, and changed its missions and responsibilities. Such a big political change led the consolidation plan to be suspended for a long time. (Song, 2010, p. 1)*

Thus, the different textual elements extracted from government documents, interview transcripts, and media news hang together to illustrate the first attempt of rare earth industrial consolidation and explain the roots of its failure. In this process, the central government still functioned as a supreme leader to develop plans and make decisions, and required coordination between the local governments and the local enterprises. However, without sufficient pre-mediation and pre-communication of the detailed compensation and integration schemes among the central state, local authorities and local businesses, the dramatic consolidation plan for the Chinese rare earth industry was eventually suspended in 2003.

### 5.3.2.2 The Second Industrial Consolidation from 2009 to 2012

Ho and Vermeer (2006) point out that the environmental awareness of Chinese civil society and the public's receptiveness to government environmental programmes improved greatly in the 2000s. In such a context, after the first attempt of industrial consolidation failed in 2003, several local NGOs in Baotou, after a three-year on-site investigation, held a press conference relying on the local media, and exposed the serious environmental pollution of the rare earth industry with a large amount of statistics and photographs of the rare earth tailings dams on the outskirts of Baotou in 2006. After that, the environmental issues in China's rare earth industry have gradually been exposed, attracting ever broader attention from both domestic society and the global media.

The environmental issues of China's rare earth industry have attracted a broad range of Western media coverage: the Sunday Times published the article '*Chinese Pay Toxic Price for a Green World*' to describe the heavily-polluting industrial city of Baotou (Hilsum, 2009). The article '*Earth-Friendly Elements, Mined Destructively*' published in the New York Times focuses on another rare earth production base in Jiangxi Province which has also caused huge damage to the local ecology and environment (Bradsher, 2009). The Daily Mail published the article '*In China, the True Cost of Britain's Clean, Green Wind Power Experiment: Pollution on a Disastrous Scale*', pointing out that the true cost of Britain's wind power experiment is serious environmental deterioration in China caused by the rare earth industry (Parry and Douglas, 2011). The article '*Pollution the Big Barrier to Freer Trade in Rare Earths*' published by Reuters indicates that serious environmental pollution of the rare earth industry has led China to squeeze exports (Stanway and Regan, 2012). The environmental issues of China's rare earth industry have also attracted unprecedented attention from Hu's new central government.

As discussed in Section 5.3.1.2.1, although the corporate reform during the 1990s changed the features of SOEs across the entire country, the different levels of government have still been the major shareholders of SOEs in China's rare earth industry. With ever more attention from the central state on the environmental governance of the Chinese rare earth industry, since 2005, under the new government's leadership, the MIIT has begun to take over the development of the rare earth industry. In 2012, the State Council Information Office of the PRC published the '*White Book*' to outline the development of China's rare earth industry under the control of the MIIT after 2005. According to the *White Book*, in 2006, the MIIT began to control the total

amount of mining of rare earths in China. In 2007, the MIIT began to implement mandatory production management to control the total amount of rare earth production, in order to realise sustainable development. In the same year, the MEP, in conjunction with the MIIT, the MC and the MLR, began to develop a series of detailed plans for environmental governance of the rare earth industry. In 2008, the MIIT issued the ‘*National Mineral Resource Plan (2008-2015)*’, developing the protective pattern of rare earth mining and requiring local governments to implement the plan through cooperating with local rare earth enterprises. Since then, all business activities in the rare earth industry such as mining rare earth ores and producing rare earth materials have again been strictly under the governmental regulation and supervision. In 2009, the MIIT substantially increased tax charged on rare earth production, strictly restricted rare earth mining rights, and continuously prohibited the exploration of new rare earth mines and the expansion of existing mines’ production capability (The State Council Information Office of the PRC, 2012).

In order to implement the rational and orderly exploitation of rare earth mines, upgrade deep-processing and energy-saving technologies, and realise low emissions in China’s rare earth industry, a consensus was reached in the central state to establish an effective environmental governance system via efficient industrial consolidation. In 2009, the ‘*2009-2015 Rare Earth Industry Development Plan*’ was confirmed by the MIIT, which aimed to consolidate the Chinese rare earth industry to the three large SOEs, including BSRE, China Minmetals Non-Ferrous Metals Corporation, and Jiangxi Copper Corporation (The Ministry of Industry and Information Technology of the PRC, 2009). According to this plan, BSRE, with strong financial support and preferential policies supported by the central state and local governments, was required to integrate all rare earth enterprises in northern China via different strategies of mergers and acquisitions. In fact, under the ever stricter rare earth mining control from the central state since 2005, the only way for the rare earth mining corporations to survive in northern China was to join BSRE:

*Different from the dispersed distribution of the heavy rare earth resources in southern China, reserves of the light rare earth resources are concentrated in Baotou’s Bayan Obo Mining District. Nowadays, we [BSRE] are the only enterprise authorised to conduct mining legally, so that we have the supreme advantage to integrate the northern rare earth industry. (COM5, Extract 2.17)*

Owing to the strict resource control, decided by the central state and implemented by the local governments, up until 2006, the number of rare earth smelting and separating corporations in Baotou had decreased from more than one hundred to 35, due to the lack of resource supply. In 2008, Baotou Steel Rare Earth International Trade Corporation (BSREITC) was established, and BSRE made its sales department an independent subsidiary, in order to attract more downstream rare earth enterprises to join its downstream supply chains. For the downstream corporations in the northern rare earth industry, refusal of any of them to join BSREITC meant they would lose supplies of rare earth materials immediately, which would be a fatal blow to their business.

*The only result for those SMEs which did not want to join the BSRE Group was 'to close down'. The direct reason was the lack of rare earth supply for production. Apart from that, in most cases, they were forced to be closed by the government authorities with a common 'excuse': serious environmental issues due to their rudimentary and outdated production and emission facilities. (NGO2, Extract 2.18)*

In the opinions of the local green NGOs, those SMEs in Baotou's rare earth industry were completely profit-driven, and were never concerned about environmental issues, not to mention upgrading production equipment and establishing waste treatment facilities. Thus, those heavily-polluting corporations had to close down, due to the huge amount of environmental pollution fines ticketed by the local governments.

Since 2011, with the instructions of the central state, the local governments have carried out a series of rectification programmes for the remaining 35 rare earth corporations in Baotou. Through asset audits and environmental audits, the local governments forcibly shut down 23 corporations that did not meet the rare earth production requirements and environmental standards: four of them were shut down directly due to illegal mining and heavily polluting activities; and the others were closed with government financial compensations due to their unsatisfactory operations and lower production efficiencies (Zhou, 2014a). For the remaining 12 corporations, they were forced to accept BSRE's acquisition requirements and became subsidiaries of BSRE. The entire consolidation process showed a strong overtone of 'big-government', in which the local governments, under the central state's prescriptive instructions, helped BSRE to consolidate the rare earth industry in northern China via mandatory administrative measures. The following text extracted from a government document shows the

administrative role of the local governments in the consolidation process. According to the government mandatory requirements:

*By the end of 2012, all the remaining 12 companies have had to sign the 'Consolidation and Restructuring Framework Agreement' with BSRE, and gratuitously transferred their 51% shares to BSRE. BSRE should develop unified strategies for these new subsidiaries, and provide a full range of support for them regarding human resources, technology, capital, raw materials and so on. (The People's Government Office of Inner Mongolia Autonomous Region, 2011, Extract 2.19)*

As shown by *Extract 2.19*, under the central government's instruction and the local governments' regulation, by utilising the advantage of mineral resource monopoly, BSRE has integrated the upstream and downstream enterprises into the supply chain for benefit-sharing. After 2012, BSRE has fully controlled the rare earth industry in northern China, and become the world's largest supplier of rare earth materials.

*With strong government support, we [BSRE] have successfully overcome the 'cross-ownership' issue. (COM3, Extract 2.20 - 1)*

*For the current Chinese rare earth industry, we have almost realised 'one voice to global market, one route to export, one way to sell, and one standard of pricing', especially for the northern light rare earth industry. (COM5, Extract 2.20 - 2).*

From the consolidation process of the rare earth industry in northern China, it is clear that the different textual elements from interview transcripts, government documents and media news hang together to enrich the discourse of such an integration process. In the process of consolidation, the central state and local governments played a leading role in regulating the market mechanism, constraining resource utilisation and providing financial and technical support. BSRE was also actively involved in the consolidation. With increased economic strength and a more advanced R&D level, BSRE can make better use of natural resources with the most advanced equipment, tailored to rare earth mining and processing, as well as discharging and recycling, to achieve the maximum yields with minimum pollution. *Extract 2.2,*



from the corporate perspective, points out that BSRE's current initiative of enhancing environmental competitiveness not only reacts to regulatory pressure from the government, but also responds to market pressure and social pressure from other stakeholders. However, in the NGOs' points of view, to the largest extent, BSRE's continuous improvement of green performance at the current stage is mainly targeted at performing well in annual environmental assessments from the MEP and obtaining the approval of next year's exporting quotas from the MC, which will be further discussed in the following social analysis, based on a series of contested issues regarding BSRE's environmental certification.

To force the rare earth industry to improve the environmental competitiveness in the global market, the MEP released the '*Guide to Environmental Information Disclosure of Listed Companies (Draft)*' in 2010, which required the Chinese listed companies, especially in the heavily-polluting industries, to publish annual environmental reports to disclose environmental information.

*Companies [listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange] are required to accurately, timely and comprehensively disclose environmental information to the public ... [which] includes periodic disclosure and temporary disclosure. ... [L]isted companies in heavily-polluting industries are required to publish annual environmental reports to disclose environmental information periodically, and to release temporary environmental reports when severe human-induced environmental damage emerges or when companies are subject to huge environmental penalties. (The Ministry of Environmental Protection of the PRC, 2010, pp. 2, 4, Extract 2.21)*

With ever more environmental concerns from the central state, green performance has been one of the most significant standards for evaluating corporate market competitiveness in China. As *Extract 2.21* shows, with the government's requirement, in order to display its strength in improving the efficiency of environmental governance of the rare earth industry in northern China and fulfil its mission of industrial consolidation, BSRE has begun to release its annual CSR report since 2009. According to the 2010 and 2012 CSR reports of BSRE:

*CSR practices in terms of environmental protection are important for improving the green performance of the Chinese rare earth industry. ... With the*

*supervision of environmental protection departments in the different levels of government, BSRE has been committed to improving the performance of energy conservation and environmental protection. (Baotou Steel Rare Earth Group, 2010, p. 2, Extract 2.22 - 1)*

*BSRE has started to expand its sewage treatment centre, upgrade discharge facilities and strictly control dust sources within mining and processing areas. ... BSRE has also begun to develop detailed plans for governing the heavily polluted rare earth ore tailings dams. (Baotou Steel Rare Earth Group, 2012, pp. 19-20, Extract 2.22 - 2)*

Combining the governmental perspective in *Extract 2.11* and the NGO's opinion in *Extract 2.13*, at the current stage, BSRE, as the only legitimate rare earth mining and processing group in northern China, should play a leading role in the environmental governance of Baotou's rare earth industry, not only continuously upgrading its original production equipment and emission facilities, but also helping its newly merged subsidiaries to deal with resource-wasting and waste-discharging issues, so as to improve the green performance of the entire group.

At the same time, with a gradual relaxation of state control over public discourse, environmental NGOs have more opportunities to express their green appeals. *Extract 2.11* from a governmental perspective indicates the indispensable role of green NGOs in the modern environmental governance system in China, although NGOs have been difficult to be an equal partner with government agencies and corporations. From *Extract 2.13*, in NGOs' opinions, they develop different strategies and skills towards environmental vandalism in industrial activities, which will also be further discussed in the following social analysis. Especially in recent years, replying to the far-reaching impacts of the mass media, environmental NGOs have begun to work effectively to assist the government to supervise corporate behaviour from a grassroots perspective, and help corporations to improve their green images in the modern environmental governance system. In fact, the second consolidation of the northern rare earth industry in China, to a certain extent, originated from the green NGOs' environmental information disclosure at a press conference in 2006, although their activities of green appeal and environmental reports were strictly controlled and restrained by the local governments after the press conference. Under the 'dual administration system', the 'non-oppositional stance' to the central state and the

local authorities has secured the survival and growth of grassroots green NGOs, which limits their role in creating an inclusive political process in China.

### **5.3.3 Explanation of Hegemonic Struggles in Environmental Governance: A Social Analysis**

#### **5.3.3.1 Contestation in the Environmental Governance of China's Rare Earth Industry**

With a transition from a planned economy to a market economy, the regime in China evolved from state capitalism to the current complex politico-economic system that contains multiple models of VoC, which direct to the changes of genres of environmental governance from highly prescriptive planning to government supervision. According to Levy and Newell (2005), corporations and NGOs, as significantly hegemonic struggles over complex politico-economic systems, have played increasing roles in challenging the traditional 'big-government' mode in environmental governance. However, China's traditional politics addressed the 'government of men' rather than laws, which left impressive influences even on the modern governance regime (Shi et al., 2014). In China, the state has still achieved its hegemony over business and civil society on the basis of a 'soft authoritarian' regime (Johnson, 2002; McCann, 2014), and the genres of hegemony in environmental governance retain a 'big-government' overtone. Until the present day, lower level governments and individual officials have still been required to deeply understand the central guidelines and organise periodical discussions on the central instructions from top leaders of the CPC. Most citizens seem to have accepted, or at least have accustomed themselves to such a 'soft-authoritarian' governance regime, resting on a 'grand but unspoken bargain' between the state and civil society (Brandt and Rawski, 2008). To provide a more explicit and dynamic understanding of the hegemonic struggles among the state, business and NGOs over the environmental issues in China, in this section, the researcher selected four contested issues in the development of environmental governance of China's rare-earth industry to discuss the contradictions and struggles involved in the current politico-economic regime in China.

#### *Payoffs*

In recent years, with the deepening of the political and economic reforms in China, the environmental awareness of the Chinese citizens has been greatly improved. In 2006, several

local green NGOs held a press conference to expose the serious environmental pollution of rare earth tailings dams on the outskirts of Baotou, which attracted extensive concerns from the entire rare earth industry, local residents, international NGOs and global media, as well as unprecedented attention from Hu Jintao's central government. With more attention from the central state placed on the local industrial pollution in Baotou, corporate environmental information disclosures have been ever more transparent to both the state and the public in China. The local farmers and villagers had embarked on a long bargaining road with BSRE, appealing for payoffs for their losses, such as withering of crops, deaths of livestock, and treatment of diseases like osteoporosis, diabetes and chest problems. This compensation dispute, which had lasted for nearly three years since 2009, has also directly affected the BSRE's environmental certification conducted by the MEP since 2011 (Zhai, 2012).

Under the central guideline of rare earth industrial consolidation, since 2009, BSRE has begun to integrate all the other rare earth companies in Baotou. The fact is that when the local farmers and villagers heard the nearby SMEs would be merged by BSRE, which possessed sufficient economic strength to make payoffs for their losses, they gathered immediately to ask for payoffs from BSRE. Especially after the industrial consolidation, BSRE has become the sole target of public criticism towards environmental pollution. However, it has always been difficult to reach agreements on the specific amount of payoffs between BSRE and local residents. Each successful merger and acquisition in BSRE was inevitably accompanied with a certain degree of social disturbance among the local residents. Without satisfactory payoffs, a series of 'illegal demonstrations'<sup>5</sup> was organised, to not only directly influence the normal operations of BSRE and its new subsidiaries, but also to affect the appraisal of achievements of the local governments in terms of social harmony and sustainable development.

To secure the smooth operation of local business and secure social stability, the Inner Mongolia government required the Baotou government and BSRE together to make payoffs to local residents. In order to seek an efficient way to deal with the compensation disputes in a quiet

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<sup>5</sup>Although according to Article 35 of the '*Constitution of the People's Republic of China*', Chinese citizens enjoy freedom of speech, of the press, of assembly, of association, of procession, and of demonstration, different levels of government have always implemented very stringent restrictions on demonstrations for a rather long time. Especially after the '*Law of the People's Republic of China on Assemblies, Processions and Demonstrations*' issued in 1989, demonstrations need to go through a series of complex government approval processes in order to be carried out legally, with the result that it is almost impossible for the public to engage in legal demonstrations against local authorities. Available at: [http://www.npc.gov.cn/englishnpc/Constitution/node\\_2825.htm](http://www.npc.gov.cn/englishnpc/Constitution/node_2825.htm); [http://www.npc.gov.cn/englishnpc/Law/2007-12/12/content\\_1383911.htm](http://www.npc.gov.cn/englishnpc/Law/2007-12/12/content_1383911.htm).

manner, in 2012, several local green NGOs, led by the Baotou Environmental Science Institution (BESI), were chosen by the Inner Mongolia government to conduct an assessment of local environmental damage and to represent local residents to negotiate with BSRE and the Baotou government in terms of detailing the amounts of payoffs and further governing plans. All actors involved were happy to do this: for local governments, they preferred a quicker way to solve compensation disputes via NGO mediation, since the increasing discontent among the masses with different forms of demonstrations directly influenced their performance in government achievement evaluation in the aspect of social stability; for local residents, they preferred a more efficient way to obtain reasonable payoffs, and they preferred to trust the environmental pollution evaluations from NGOs, which are marked with a neutral and objective position in carrying out green activities and involved as a third party, rather than those from BSRE, or even from the Baotou government, which were involved as a ‘referee’ and a ‘player’; for BSRE, under significant pressure from local governments, the ‘endless bargaining process on payoffs’, which has already affected BSRE’s normal operations and green performance, needed to be ended as soon as possible; and for local green NGOs, it was an excellent opportunity and great honour to be chosen by the government as a ‘mediator’, which not only helped them to expand their influence, improve their reputation and attract more funds, but also softened the ‘love-hate’ relationship with the local authorities to obtain a relatively relaxed environment in which to survive and operate.

*[W]e can represent the local residents to negotiate with BSRE and the Baotou government, avoiding the direct contradictions between the two sides. (NGO1, Extract 2.23 - 1)*

*Our mediation can be much more easily accepted by both BSRE and the Baotou government, as well as the local residents, to avoid the endless bargaining. (NGO3, Extract 2.23 - 2)*

The local NGOs offered relatively objective assessments of the local environmental damage, but also developed reasonable payoffs for local residents, avoiding the dilemma of the endless ‘bargaining activities’ between the local residents and BSRE. Within only a matter of weeks, reasonable amounts of payoffs were developed and agreed upon by all sides (NGO4), and the local residents finally obtained satisfactory payoffs. The resolution of the three-year compensation dispute greatly enhanced the green image of BSRE. BSRE’s payoffs were a good

start for the fulfillment and betterment of its social responsibility after monopolising northern China's rare earth industry.

In this process, the Inner Mongolia government still played a key role as a 'boss' in guiding and controlling the entire process of payoffs. The only requirement from the 'boss' was to end the payoff dispute as soon as possible and to avoid a wave of widespread social disturbance in Baotou. The Baotou government and BSRE were chosen as the 'executor' to make the payoffs, although the Baotou government claimed that it would no longer help BSRE to clean up any environmental mess after the BSRE's corporate reform; without the Baotou government's financial support, BSRE would certainly not have been willing to spend a large amount of money, which had originally been earmarked for expanding production or upgrading equipment, on payoffs. The local environmental NGOs were chosen or 'arranged' as the 'mediator' to alleviate the conflicts between BSRE and local residents. It seems that they represented the local residents in negotiating with the local authorities and business; in fact, to a certain extent, under the Chinese state-dominated regime, they were also 'captured' by the local authorities to be their greening tools in mediating the contradictions and solving the payoff issues.

### *Environmental Assessment*

With the completion of the rare earth industrial consolidation in northern China, the environmental performance and green competitiveness of BSRE represents the entire image of China's northern rare earth industry. To verify the consolidation programme in the northern rare earth industry valid for bettering environmental governance, the central state and the local governments have paid increasing attention to BSRE's green performance. Responding to the central requirement of improving its green competitiveness in the global rare earth market, BSRE needs to continue to upgrade production and emission technology and equipment, not only at the original site, but also covering all the newly acquired subsidiaries with relatively rudimentary facilities, in order to reduce the industrial waste discharges to reasonable levels as regulated by the MEP. BSRE, with abundant capital and professionals, is expected to commence governing the heavily polluted rare earth tailings dams left by both the BSRE's new subsidiaries and the closed SMEs in the 1990s' mining chaos.

Since 2011, to strengthen government supervision of the green performance of corporations in the Chinese resource-based industries, the MEP has begun to publish annually a list of

environmentally friendly enterprises. The corporations whose names are not on the list, regardless of whether they are private corporations or SOEs, would directly be confronted with a temporary suspension of production for immediate rectification and lose the following year's export quotas allocated by the MC. Since 2012, the MEP has been implementing ever more stringent environmental standards with stricter environmental monitoring and assessment measures, in order to promote the rational, orderly, intensive, and environmentally friendly development of China's rare-earth industry (The State Council Information Office of the PRC, 2012).

For BSRE, as the largest SOE in the Inner Mongolia Autonomous Region, its economic performance directly determines the local economy as well as the achievement of the local governments. As the world's largest rare earth supplier, BSRE has always been approved with the largest export quota. However, in 2012, the name of this enterprise did not appear on the first list of qualified export enterprises published by the MC, since it failed to pass the first and second environmental assessments conducted by the MEP (Zhai, 2012). At the beginning of July 2012, the MEP released an announcement '*Interim Measures on Management of Rare Earth Mandatory Production Plan*', and finally warned BSRE that if it failed to be listed on the third environmental assessment list published at the end of July, it would face suspension of production for immediate environmental rectification and lose all the export quota for the following year approved by the MC (The Ministry of Commerce of the PRC, 2012).

*In order to help BSRE pass the [third] environmental assessment, the Inner Mongolia government invested 6 billion Renminbi (RMB) Yuan and developed a detailed plan to support BSRE in governing the polluted rare earth tailings dams. (NGO3, Extract 2.24)*

Faced with the final warning of the MEP, both the local governments and BSRE developed specific plans to improve BSRE's green performance. The Inner Mongolia government invested 6 billion RMB Yuan to help BSRE govern rare earth tailings dams and expand sewage treatment ponds and waste recycling pools (Zhou, 2014b). BSRE also invested 2.2 billion RMB Yuan in upgrading production and emission facilities (COM3). An unprecedented amount of more than 8 billion RMB Yuan was invested in resolving the environmental issues in the Chinese rare earth industry (Zhai, 2012). With the strong financial and technical support of the local governments, the name of BSRE finally appeared on the third list of environmental assessment. '*The result of*

*the third assessment had been expected before it was formally published' (NGO3). According to the two selected special business reports, respectively from the most influential financial website and business newspaper in China, the direct effects of such a huge amount of investment for environmental governing practices in Baotou's rare earth industry can be identified.*

*On 27th July, the MEP published the third list of enterprises in the mining industry that passed environmental assessment, and the name of BSRE was finally listed on it, but followed by a label 'smelting separating section' in brackets. ... It would be absurd for the leading SOE in the rare earth industry to suspend production for environmental rectification due to the national policy constraints. (Zhai, 2012, p. 1, Extract 2.25)*

*As the leading rare earth corporation in China, the next year's export quota of BSRE being approved by the MC was just 'a matter of time'. (Zhou, 2014b, p. 1, Extract 2.26)*

The editor Zhai Ruimin, from *163 Finance*, and the journalist Zhou Zhou from *National Business Daily* respectively expressed their views towards BSRE's name being listed on the environmental certification list. The interesting thing is that, in order to obtain the environmental certification and the following year's export approval, BSRE finally shelved its mission of governing the rare earth tailings dams, and passed the environmental assessment via the rapid expansions and upgrades of emission and waste treatment facilities. In fact, the rare earth tailings dams have always been the most serious environmental problem in Baotou's rare earth industry. With more than fifty years' buildup of waste emissions since the start of Baotou's rare earth industry in the 1961, more than one hundred tailings dams are left on the outskirts of Baotou, necessitating a very long-term recovery plan. BSRE has been required by the central state to take the lead in managing these tailings dams, which has caused BSRE to be repeatedly unlisted on the environmental certification. The environmental issues of rare earth tailings dams were eventually stripped from BSRE for it passing the environmental assessment, not only preserving the seriousness of the national environmental policy of the MEP, but also providing a chance for the improvement of BSRE's green performance, and for the healthy development of the entire Chinese rare earth industry. The different positions of multiple actors and the hegemonic struggles among them in managing the tailings dams will be discussed as another contested issue in the following section.



At the same time, the successful resolution of the payoff dispute enhanced the green image of the entire BSRE Group, which was appraised by the central state as a good start for the fulfilment and betterment of BSRE's CSR practices, and helped BSRE pass the environmental assessment.

*We believe that the smooth resolution of the payoff dispute helped the MEP to make the final decision on BSRE's certification in the third-round environmental assessment in 2012. (NGO3, Extract 2.27)*

In this process, the local governments played the most important role in helping BSRE clean up environmental messes. To help BSRE pass the third-round environmental assessment, the local governments came up with such a good idea to shelve BSRE's task of governing the tailings dams, with the 'excuse' that several decades may be needed to restore the heavily polluted sites; so that it is not fair to evaluate BSRE's green performance based on the current situation of tailings dams. In fact, the central state also needed such an 'excuse' to get the world's largest rare earth supplier out of such a dilemma; and also 'hush' those corporations whose names still failed to be listed on the environmental certification. NGOs also played an active role in negotiating payoffs with local residents and BSRE. No matter whether or not the local grassroots green NGOs were 'captured' by the local authorities, local farmers and villagers received satisfactory amounts of payoffs, for which they had strived for a number of years. BSRE, as *Extract 2.2* shows, 'responding to huge regulatory pressure from government agencies, market pressure from investors, competitors and customers, and social pressure from green NGOs and the populace' (COM3), began to engage more in improving its green supply chain management via upgrading production equipment and establishing emission and recycling facilities. From 2011 to 2012, to ensure their names appeared on the environmental certification lists of the MEP, over forty million RMB Yuan was invested in the environmental governing practices in China's heavy industries, which also significantly improved the green performance of the entire rare earth industry in China (Zhai, 2012).

### *Tailings Dams*

The most difficult task for the improvement of BSRE's green performance is how to govern the hundreds of heavily polluted tailings dams left by the 1990s' mining chaos, which requires not only an enormous amount of funding, advanced technology and facilities, outstanding research

and development teams, but also the strong financial and policy support of the government. It is impossible for BSRE to undertake this task alone even after BSRE's consolidation of northern China's rare earth industry. In 2006, the environmental problems of tailings dams were exposed by several green NGOs. The NGOs' green activities hit a nerve with the local authorities, which took tough actions to block the further spread of information: all the videos about the press conference on the internet were deleted; and at one time, all the involved NGOs were asked to 'keep their mouths closed' to outsiders unless they had the permission of the relevant government departments (NGO4). However, such a serious environmental problem had already attracted widespread attention before the information blackout, and a large amount of domestic media and international media sent their journalists to Baotou to report on the local pollution issues.

In 2011, the central state issued clear instructions to govern the heavily polluted tailings dams immediately led by BSRE, and required the local governments to make every effort to provide complete support. Especially during the period of BSRE's environmental performance assessment in 2012, which will be further discussed as another contested issue in the following section, governing tailings dams became one of the most important missions for both BSRE and the local governments. The Inner Mongolia government appropriated a large amount of special funds to support BSRE's environmental remediation, and required the Baotou government to assist BSRE in carrying out practical plans, allocating the funds rationally and implementing practices effectively. However, since the toxic and radioactive waste in rare earth tailings dams has poisoned the underground water system, it may take several decades to recover from the effects of the heavy pollution.

In this process, the green NGOs played a role of 'environmental monitor' to expose the polluting activities of SOEs; this is the best they were able to do to fight against SOEs in China's environmental governance at the current stage. Under the 'dual administration system', green NGOs are strictly banned from acting autonomously from the government (Heberer, 2012), so that it is impossible for them to fight against SOEs' environmental vandalism directly. The local governments, as a 'referee' and a 'player' in environmental monitoring and governance, on the one hand, admitted the existence of tailings dam issues; but on the other hand, they attempted to conceal the seriousness of pollution. After the media exposure of environmental problems, the local governments had to express their willingness to undertake the responsibility of environmental remediation with BSRE. In order to obtain 2012's environmental certification,

under the BEITC's instructions, BEPB needed to provide practical suggestions on both the remediation of tailings dams and the improvement of BSRE's green supply chain management. To assist the implementation of greening advice, other financial departments and business administration departments were also required to fully support BEPB in implementing governing practices at the corporate level. However, BEPB only obtained all-round support at that particular moment, and most of the time BEPB had still been powerless in decision-making. This is an awkward situation for EBPs in China's scientific and sustainable development. BSRE, like a child under the shelter of his parents, displayed an innocent view that the environmental mess of tailings dams were mainly left by the SMEs in the 1990s' mining chaos; while showing a very positive attitude to bravely taking over the issue that was historically intractable for the central state, so as to pass the 2012 environmental performance assessment.

#### *Different Interests of Government Agencies*

Due to the special historical, political and economic roots, government agencies in China usually prioritise economic targets over environmental protection goals, in order to promote economic growth and improve people's living standards, in return for 'public acquiescence to its autocratic rule and anachronistic ideology' (Brandt and Rawski, 2008, p. 17). Regarding the Baotou government, BBB emphasises local business and economic development; while BEPB focuses on green performance of local businesses. In order to improve the green performance of the rare-earth industry, large amounts of money are always needed, even more than the investment required for production. From the BBB's point of view, BSRE should not allocate the majority of investment to upgrading production equipment and installing emission facilities, since maximising the outputs and the profits, expanding the production capacity and promoting the local economic growth should be the ultimate goals. For BEPB, any environmental damage by BSRE would directly affect its achievement and evaluation, so that BEPB makes all efforts to guarantee that BSRE is operating in an environmentally friendly manner. Such an implicit conflict, in which BBB usually holds the advantage over BEPB due to the traditional thinking that 'economic success is the success of local governance', hinders the efficient cooperation between internal government institutions to develop and implement environmentally friendly projects.

*The 'cats' [local environmental protection bureaus] are bred by their 'hosts' [local governments]; so that whether the cats can catch the 'mouse' [illegal*

*enterprise] and how many 'mice' they can catch are fully determined by the 'hosts', not by the 'cats'. (GOV3, Extract 2.28 - 1)*

The extractive industries rely on the government to gain legitimacy and critical resources, while the government is also heavily dependent on the extractive industries to fulfil both its political and financial goals (Shi et al., 2014). Such a business-political tie results in the ineffectiveness of BEPB in administrative supervision and management.

*We [BEPB] undertook field testing, and then required BSRE to develop viable rectification programmes against its environmental weaknesses, but never received any response; and we can do nothing more. (GOV3, Extract 2.28 - 2)*

In fact, it has always been difficult for environmental protection bureaus (EPBs) to seek the support of other government agencies with 'real power'. For example, like the BBB, 'the officials themselves are being held administratively and politically accountable for the successes of businesses in their jurisdiction, ... [which] means officials also benefit from maintaining personal ties with firm managers' (Shi et al., 2014, p. 64). In other words, government officials in the key sectors are heavily dependent on the mining sectors and the mineral rights for both public revenue and personal wealth. Thus, local government agencies with more executive power in business, for example BBB, are usually unwilling to assist EPBs. The same embarrassment is also manifested in the executive power of the Ministry of Environmental Protection (MEP) in the central state. In the case of BSRE's environmental certification, although the MEP had carried out green evaluation on BSRE's performance and issued suggestions on improving BSRE's green performance for a long time, both the local governments and BSRE had not taken effective measures, until the MEP sought the assistance of the Ministry of Commerce to restrict BSRE's export quotas in the following year due to its poor green performance.

In recent years, with the increasing emphasis on environmental performance of the extractive industries from the central state, assessments of local governments' achievements are not only based on economic growth and social stability, but have also become gradually related to sustainable development. On the one hand, in order to be highly evaluated by the central state, for example in Baotou, both the Baotou and Inner Mongolia governments have similar interests to BSRE on profit maximisation. On the other hand, the local governments have to take stricter

measures to monitor BSRE's operations for the purpose of abiding by the national environmental protection standards. To promote internal cooperation between different government departments, the Baotou government established BEITC for internal control in government. Any new economic development plan made by BBB or environmental development plan made by BEPB should be reported to BEITC for approval to be put into practice. BEITC also engages in administrative coordination to urge departments such as BBB to assist the BEPB in implementing certain significant environmental projects at the corporate level, such as in the case of BSRE's environmental assessment, where the Inner Mongolia government invested huge amounts of money to help BSRE clean up its environmental mess and all the other departments in the Baotou government were required to provide full support for BEPB's environmental rectification plans. However, most of the time, it is still hard to seek the assistance of BBB and BEITC to implement an environmental plan developed by BEPB. It is an awkward situation for the further implementation of the 'scientific development' programme in China's local governance, but it is a necessary stage of development, due to the profound influence of economic priorities and actions after the foundation of New China.

### **5.3.3.2 Gramsci's Framework in China**

For Gramscian studies on environmental governance, Levy and Newell (2005) emphasise that corporations are directly involved in the process of energy reservation, resource depletion, and waste emission, and play a significant role in environmental governance to implement and negotiate environmental policies. In China, it can be clearly seen that the state still plays a key role in forcing business to improve environmental performance. The central state develops various indicators on resource mining, energy consumption and waste emission, to standardise and restrict corporate behaviour of the rare-earth industry. In order to implement these indicators at the corporate level, the regulatory institutions and monitoring authorities at lower levels of government are required to undertake periodic inspections and provide necessary support (Galarraga et al., 2011; Harashima, 2000; Lo et al., 2001).

In BSRE's case, on the one hand, the local governments rely on the economic performance of BSRE to fulfil both financial and political goals (Shi et al., 2014); on the other hand, the local governments also need to strictly focus on BSRE's green performance, ensuring all the national production and emission standards can be met. Although the local governments claimed that they were no longer the BSRE's shelter in dealing with environmental problems, and there also exists

disagreement and contestation about the green growth of the local economy between different government institutions, both the Inner Mongolia government and the Baotou government still play significant roles in helping BSRE to make payoffs to local residents, govern rare earth tailings dams, pass environmental performance evaluation, and improve green performance.

Nowadays, with the increasing environmental awareness of Chinese civil society, any further serious environmental issues related to BSRE will inevitably attract the attention of the public and cause different levels of disturbance among civil society, not only directly influencing the achievement evaluation of the local governments concerning social stability and sustainable development, but also resulting in a huge number of payoffs to the local residents. Thus, with the central state attaching ever more attention to the sustainable issues in the process of local economic development, green growth has become an important criteria for the achievement assessment of local governments. In order to create a ‘win-win scenario’, with the financial and policy support of the local governments, BSRE should continuously improve its green performance.

From BSRE’s first CSR report published in 2009, it can be seen that, reacting to the increasing environmental pressures from government agencies, shareholders and civil society, BSRE has been aware of its responsibility of resource protection and energy conservation as well as emission reduction (Baotou Steel Rare Earth Group, 2009). In 2010, BSRE released its second CSR report, clearly identifying ‘securing sustainable development and building environmentally-friendly enterprise’ as the major principle for the corporate development strategy (Baotou Steel Rare Earth Group, 2010, p. 1). In 2012, on the basis of the painful lessons from managing the rare earth tailings dams, the board of directors in BSRE developed the new principle – *‘if we take measures earlier, environmental problems may be solved proactively; if we take actions too late, environmental problems may never be resolved’* – for the improvement of green performance (COM5). Under the new principle, BSRE renewed a large amount of outdated equipment and carried out more than 40 environmental projects. According to BSRE’s 2012 CSR report, BSRE has completely abandoned the original organisational structure and eliminated the outdated equipment, and continuously enhanced the green performance (Baotou Steel Rare Earth Group, 2012). However, *‘for the rare earth tailings dams, they are still a big issue for BSRE although what has already been done is much better than before’* (COM3), and the Chinese rare earth industry still has a long way to go in terms of ‘real’ sustainable development.

Levy and Newell (2005) view civil society as a significant battleground for broader social and political conflicts, and a neo-Gramscian perspective regards NGOs as the autonomous social groups challenging the power of the state and the capital in environmental governance. However, green NGOs in China, under the ‘dual administration system’ of the state, have been much less successful and autonomous in political negotiations and contestations than those in Western countries. With consideration of the strong state power in China, Spires (2011, p. 1) proposes that grassroots NGOs and the authoritarian state coexist in a model of ‘contingent symbiosis’, in which the state allows grassroots NGOs to operate while relieving some of the state’s social welfare obligations. Thus, certain NGOs helping vulnerable groups can develop within a relatively relaxed context; while the other NGOs, with aims to expose local problems such as environmental pollution and human rights issues, always survive under the government’s strict supervision. Huang (2013) and Li (2011) also illustrate the ‘love-hate’ relationship between the state and NGOs: on the one hand, NGOs can provide certain social services that the government cannot do as effectively; on the other hand, NGOs’ success in alleviating social suffering in the eyes of the local governments is a public indictment of the failed local bureaucracy. The major obstacle for the vibrant development of NGOs in China’s environmental governance stems from the authoritarian nature of the Party state and its hostility to grassroots democracy.

In recent years, as *Extract 2.13* shows, relying on the increasing role of the mass media, green NGOs have played a more active role in monitoring local environmental vandalism and facilitating collective action from a grassroots perspective in China. Under the dual administration system, they have developed different legitimate strategies to deal with environmental pollution caused by different types of enterprise. Typical responses from NGOs regarding their strategies have been selected as follows:

*We can fight against the environmental vandalism of foreign-funded enterprises in a relatively direct manner. We can contact their senior managers responsible for corporate environmental performance directly and ask them to focus on environmental performance. Or we can report to local EPBs and appeal for local authorities to exercise regulation. (NGO5, Extract 2.29 - 1)*

*Private enterprises, especially those with a long history under local protectionism, always have a certain ‘guanxi’ (relationship in English) with local authorities. In dealing with their environmental problems, we usually rely*

*on the influence of the mass media, to expose their polluting activities. However, our environmental information disclosure has still been strictly supervised by local authorities (NGO8, Extract 2.29 - 2)*

*We try our best to avoid a 'head-on collision' with SOEs' polluting activities, and usually act as a 'facilitator' to help them improve environmental performance by providing information and technical support, as well as a 'mediator' to help them to communicate with the public about the environmental issues. (NGO6, Extract 2.29 - 3)*

The views of the strategies of grassroots green NGOs to fight against the polluting activities of different enterprises were similar, as shown by *Extract 2.29*. In recent years, the role of the mass media has also been quietly changing: acquiring a new role as a 'mouthpiece of society', although still firmly keeping their original role as a 'mouthpiece of the Party' (Yang, 2005; Zeng, 2009). Relying on the increasing influence of the mass media, certain environmental NGOs have made limited but inspiring progress in monitoring the local environment and facilitating collective action.

For example, Institute of Public & Environmental Affairs (IPE), as a leading civil environmental NGO in China, has developed two maps/databases of current water and air pollution in China, and published the latest pollution lists through different media channels such as newspapers, press conferences and internet media since 2006. Up until 2013, in response to IPE's environmental information disclosure, more than 200 corporate giants have spoken out to explain to the public why their manufacturing facilities in China or their Chinese suppliers violated the Chinese air and water laws (NGO5). In order to get off IPE's 'blacklist', up until 2012, more than 50 corporations had taken corrective actions and agreed to accept IPE-supervised environmental audits of their factories (Lee et al., 2012). With the stricter requirements of environmental monitoring from the central state, and the growing desires of the multinationals to secure their reputations in the Chinese market, IPE has become one of the leading environmental 'watchdogs'. Many transnationals such as Apple, Motorola, Pepsi, HP, and Timberland were exposed by IPE as polluters in China. Certain far-sighted corporations like Wal-Mart and Nike embraced IPE as a partner in improving the environmental management of their Chinese supply chains. As stated by May Qiu, Nike's health, safety, and environment manager for the Asia



region, ‘the IPE web site provides a really good platform for us to reduce the risk of environmental violation along our supply chains in China’ (cited in Lee et al., 2012, p. 39).

Rather than taking ‘direct actions’ to fight against corporate pollution activities, green NGOs in China, under government supervision, usually play the role of ‘environment monitor’ or ‘conflict mediator’, as shown in the case of BSRE. However, under the state-dominated society, requests from local governments and corporations to engage local green NGOs in environmental governance usually have clear purposes, either for dispute mediation or for green propaganda. Thus, the issue of how to avoid grassroots NGOs being further ‘captured’ by local authorities and large corporations as their greening tools has challenged the future hegemonic relations in China’s environmental governance, which requires more observation and investigation on the development of civil society in the foreseeable future with the further deepening of China’s democratisation process.

#### **5.4 Conclusion**

Since the early 1990s, China’s politico-economic regime moved from a planned economy toward a market-oriented economy. However, the unique historical and politico-economic trajectories of one-party dominance over 5,000 years still retain the ‘big-government’ overtone in China’s institutional diversity. From the perspective of VoC, the empirical findings pointed out that China’s politico-economic regime has transformed from state capitalism to the current combination of multiple models of VoC. The state maintains control over the commanding heights of the economy via SOEs, while private- or hybrid-owned corporations are flourishing in retail and manufacturing industries. With a gradual relaxation of state control over the economic structures and even over public discourse, NGOs, as the only legitimate means for civil society to participate in public affairs, have gradually emerged in China, surviving under the government’s ‘dual administration system’. With the deepening of the reform and opening-up, environmental issues have officially been put on the agenda of the central state.

In such a new context, a textual analysis was carried out in Section 5.3.1 to identify the genres of the discourses of environmental governance of China’s rare earth industry, shifting from highly prescriptive planning to government supervision. Based on the different styles of the textual elements, the different consciousness of environmental governance from the perspectives of three pillar actors were displayed with different focal points. In Section 5.3.2, a process analysis

was carried out to combine the different textual elements to illustrate the two attempts at rare earth industrial consolidation in pursuit of sustainable development. Followed by a social analysis in Section 5.3.3, from a wider perspective of political discourses, on the basis of a series of contested issues over the environmental domain in China's rare earth industry, the hegemonic positions of government agencies, corporations and green NGOs as well as their hegemonic struggles in the modern environmental governance system in the rare earth industry were critically investigated. The state still plays a leading role in regulating and coordinating hegemonic alliance building in the environmental governance of China's rare earth industry. Under government supervision, the potentials of non-state actors in securing sustainable development have gradually been unlocked. Corporations have begun to place more focus on their environmental performance, so as to satisfy the government requirements, meet the national standards and increase green competitiveness in the global market; while green NGOs have increasingly played the roles of environmental monitor and conflict mediator, rather than taking direct actions to fight against corporate pollution activities. In the initial stage of China's sustainable development, the state still matters significantly in dealing with all kinds of environmental issues in business, for example, in BSRE's case, making payoffs, governing polluted sites, supporting corporate green upgrade; although there still exists disagreement regarding green growth plans within government agencies.

Based on the empirical findings in the two analytical chapters above, this research dynamically investigated the changing discourses of environmental governance of China's rare earth industry, and bridged the empirical gap in discussing the neo-Gramscian framework of environmental governance at an organisational level within the unique Chinese politico-economic regime, with particular emphasis on the reconfiguration of state power in China's contemporary institutional formations and political contestations. Linking to the theoretical framework of this research, the empirical findings extend the Western-biased neo-Gramscian approach to China's unique institutional diversity and enrich the macro-level VoC divisions with the micro-level hegemonic struggles in China's institutional formations, which will be further discussed in the following chapter.

## CHAPTER SIX: DISCUSSION

### 6.1 Introduction

Based on the previous two timeline analytical chapters, the empirical findings illustrated the changes of China's varieties of governance from a planned economy to a market economy, the changes in environmental concerns of multiple actors in the rare earth industry from an extensive growth model to an intensive growth model, and the changes in the different roles of the state, business and civil society as well as their changing power relations in the development of environmental governance of China's rare earth industry. This chapter links all empirical findings to the theoretical framework of this study, through summarising the changes of China's institutional diversity at the macro level, and the changes in the hegemonic struggles among three pillar actors over the environmental domain in the rare earth industry at the micro level, as well as the distinctive discourse of civil society in the modern environmental governance system in China in Section 6.2. Then on the basis of these empirical findings, Section 6.3 focuses on how the empirical studies in this research enrich the relatively abstract typology divisions and relatively 'lean' societal theory in the VoC approach; and Section 6.4 illustrates how this empirical research encourages the neo-Gramscian environmental governance research to move forward in the future.

### 6.2 Empirical Findings: Changing Discourses of Environmental Governance of China's Rare Earth Industry

Following Fairclough's CDA approach (Fairclough, 2010), as illustrated in Section 3.4.4.2 in the methodology chapter, the previous two analytical chapters carried out the three-dimensional analysis of CDA – a textual analysis, a process analysis and a social analysis – to investigate the changing discourses in environmental governance of China's rare earth industry. Based on the theoretical framework as shown in *Figure 4 and Figure 5*, and the empirical findings on the re-configuration of state power in regulating and coordinating political contestations and accommodations in the development of environmental governance of China's rare earth industry, as well as the changes in hegemonic struggles between the state and non-state actors therein, the researcher draws a new diagram as shown in *Figure 6* to summarise these changes. From *Figure 6*, it can be clearly seen that the Chinese political economies, from the perspective of VoC, have experienced a transformation from state capitalism to a combination of multiple models of VoC,

as the *pink rounded rectangles* show. On the basis of the particular historical, political and economic trajectories of China's VoC, from the neo-Gramscian perspective, the changes in hegemonic struggles among government agencies, corporations and NGOs over the environmental contestations in China's rare earth industry are shown in the *green rounded rectangles*. From the perspective of varieties of governance, based on the case study of BSRE in China's rare earth industry, the empirical findings in Section 4.3.1 and Section 5.3.1 identified the changing genres of the discourses of China's environmental governance from a planned economy to a market economy as shifting from highly prescriptive planning to government supervision at the macro level, which are shown as *orange arrows* within the *green rounded rectangles*.

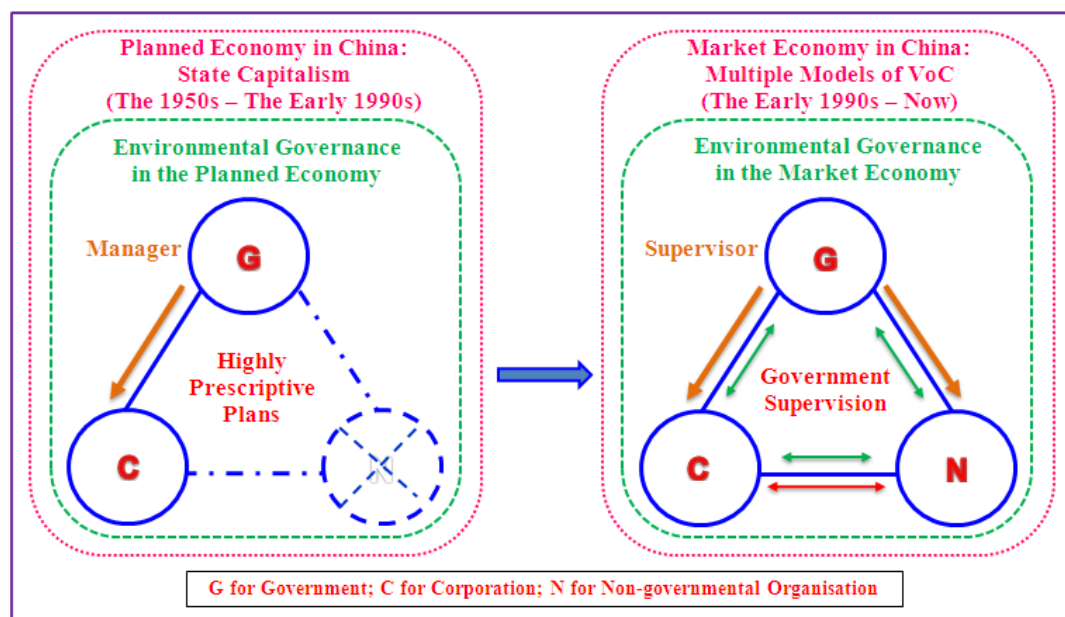


Figure 6 Changes in Hegemonic Struggles in the Development of Environmental Governance of China's Rare Earth Industry

In the context of state capitalism in the planned economy, within the *left green rounded rectangle*, there were only two ingredients, government and corporation, connected via 'highly prescriptive plans'. As shown by *Extracts 1.1, 1.3, 1.4, 1.5, 1.6, 1.8, 1.9 and 1.10*, extracted from the interview transcripts and the central state documents, the highly prescriptive plans from the central state dominated the logics of economic activities and rules of the game in Chinese state capitalism. All social discourses and activities were determined and arranged by the central state in China. With the full acceptance of the core values of the CPC, as concluded in Section 6.2, business and civil society, with little environmental awareness, became subjects of the hegemony of the state in governance during the planned economy.

For civil society, as exemplified by *Extract 1.3*, the freedom of speech of the press and the populace and the establishment of NGOs had been strictly prohibited under the authoritarian governance of the state. As the only legitimate means to effect alternative governance in China, the absence of NGO activism during the planned economy resulted in the inability of civil society to get involved in environmental governance under Chinese state capitalism. For corporate operations, as shown by *Extract 1.4*, the different levels of government acted as the real managers of SOEs in China's planned economy; while SOEs functioned as 'processing plants' to fulfil government orders within state capitalism under the control of the authoritarian state. Taking BSRE as an example, without any authority in corporate governance, what BSRE could do was to engage itself in maximising the outputs to meet the central state's production requirements. The Inner Mongolia and Baotou governments, as the real managers of BSRE, retained all profits or bore all losses of BSRE, so that they were naturally responsible for 'cleaning up' all the environmental pollution caused by BSRE. Under the government's protection, BSRE formerly engaged in immoderate mining and extensive processing activities, without any environmental concerns. For the local governments, without any emphasis on and requirement for environmental performance from the central state, what they were really concerned about was pushing BSRE to achieve the output requirements. As a result, under such an authoritarian hegemony in China's planned economy, the state's lack of environmental awareness eventually led to extensive production activities in China's rare earth industry and brought about huge environmental cost for the sake of rapid economic growth.

Since the early 1990s, China's regime has gradually transformed itself from a planned economy to a market economy, and government supervision of business and civil society has also gradually replaced the traditional highly prescriptive planning. With a shift from government to governance, China's political economy, from the perspective of VoC, has moved from state capitalism to the current combination of multiple models of VoC, containing different tactics, strategies and models within the same national boundaries, as shown by the *right pink rounded rectangle*. With the increasingly open minds of the CPC to the effective mechanisms of Western capitalism in both the politico-economic and social spheres, the central state began to realise the importance of sustainable development, as well as the huge potentials and indispensable roles of non-state actors in environmental governance. In recent years, under government supervision, corporations and green NGOs have begun to play visible roles in hegemonic coalitions with different levels of government. Under the market-oriented economy, three pillar actors in

governance began to construct a triangle relationship in the *right green rounded rectangle*, which is similar to the neo-Gramscian framework in Western countries. However, the hegemonic relations between the three actors are completely different from those in Anglo-Saxon contexts. As the *orange arrows* show, the state still plays a leading role in China's modern environmental governance system, and government supervision of business and NGO activism dominates the entire triangle relationship.

From the empirical findings, large SOEs in China, especially in heavy industries, which are directly engaged in the process of resource depletion, energy use and hazardous emissions, have begun to commit themselves to improving their green competitiveness initiatives after their corporate reforms in the 1990s. For example, after the corporate reform of BSRE, the Baotou and Inner Mongolia governments were still the two largest shareholders of BSRE and own BSRE, although they have decentralised the management power to the corporate level. The local governments have been required by the central state to undertake periodic inspections of BSRE's business activities, and the MEP began to carry out annual environmental assessments of BSRE with the cooperation of local EBPs to strengthen environmental regulations. Mainly reacting to the regulatory pressure from the central and local governments, as well as responding to the market pressure from investors, international competitors and consumers and the social pressure from green NGOs and the populace, BSRE began to place more focus on the improvement of its environmental performance and has released its CSR reports since 2009. In order to pass the annual environmental assessments from the MEP, as discussed in Section 5.3.3.1, BSRE needs to continue to upgrade production and emission technology and equipment, not only at the original site, but also covering all the newly acquired subsidiaries with relatively rudimentary facilities, in order to reduce the industrial waste discharges to reasonable levels, as regulated by the MEP.

Also since the 1990s, with improvements in education, and more open minds to the Western experience of societal influences on public affairs, the public's environmental awareness and receptiveness to government environmental programmes have gradually improved. Moving to the market economy, with the relaxation of state control over public discourse, green NGOs have emerged since the 1990s to promote public participation in China's environmental governance, and initiated the construction of a triangle relationship with government agencies and corporations in contemporary alliance building. However, different from that in Western countries, the discourse of civil society in the unique context of China's varieties of governance is distinctive, which was briefly illustrated in Section 5.2.3, and discussed over a series of

contested issues in environmental governance of Baotou's rare earth industry in Section 5.3.3.1. Due to the lack of a civil society tradition in the planned economy, the civil rights and the public awareness were always neglected in the Chinese logics of political rule and economic activities after the foundation of New China. Under today's soft authoritarian governance regime in China, civil society cannot simply be understood as a democratic force of ideological struggle, or a significant ingredient of governance with political power; instead, it usually designates an informally structured network of NGOs in China's varieties of governance, which accepts the core values of the CPC and secures a non-oppositional stance to the state. In China, NGOs have become the exclusive route for public pursuit of civil liberties in China, and the history of NGO development has shaped the trajectory of China's nascent civil society. However, with acquiescence to the autocratic rules of the state and accommodation of the CPC's hegemonic ideologies, NGOs in China have always been strictly banned from acting autonomously from the government and confronted by many restrictions to their desire to be a powerful force in securing hegemonic stability and balancing power between the state and capital, due to the strict government supervision of their activism.

The empirical findings in this research identified the biggest legal obstacle for the vibrant development of NGO activism in China as the dual administration system on NGO registration and operation, which was shown by *Extract 2.8*. In recent years, the empirical findings pointed out that relying on the increasing influence of the mass media, certain green NGOs with different strategies, as *Extract 2.9* has shown, have made some limited but inspiring progress in China's environmental governance. In most cases, as discussed in BSRE's case in Section 5.3.3, green NGOs in China's modern environmental governance system play a visible role in facilitating environmental monitoring work and mediating environmental disputes, but their potential to be a forceful actor in securing hegemonic stability has been greatly restricted by the dual administration system. Under strict local government supervision, certain NGOs that can help local governments to improve their achievements directly, such as foundations providing educational subsidies, charities concerned with street children and orphans, as well as helping patients with incurable diseases, can carry out activities within a relatively relaxed political environment; but the green NGOs, with aims to expose local environmental problems, usually survive in a tough environment with strict government restrictions. In addition, local corporations have always maintained a hostile position towards local green NGOs' environmental disclosure; thus, such a contradictory relation is marked by the *red double-headed arrow* between corporations and NGOs.

There are also three *green double-headed arrows* to connect government, corporations and NGOs; which usually connotes a method of ‘mutual exploitation’ on the basis of a non-oppositional stance towards the state, rather than ‘cooperation’ or ‘counterwork’ between the three actors in the discourse of Western countries. As discussed in Section 5.3.3.1 and Section 5.3.3.2, first of all, between the local governments and the local SOEs, the *green double-headed arrow* means that the local governments still provide financial and policy support to improve the local SOEs’ environmental performance, such as in the case of the 2012 environmental assessment of BSRE; while the local SOEs also need to improve their green competitiveness continuously, in order to achieve sustainable development and assist the local governments to realise higher achievements, so as to create a win-win scenario. Secondly, between the local governments and green NGOs, the *green double-headed arrow* means that the local governments provide sponsorship for the establishment and registration of the local NGOs; while the green NGOs help local governments to monitor local environmental changes and prevent the sudden appearance of irreversible environmental damage as well as playing the role of mediator to ease disputes between the local enterprises and the populace. Thirdly, between corporations and green NGOs, the *green double-headed arrow* means that certain far-sighted corporations embrace green NGOs as partners to improve their green images in the Chinese market, as shown in the IPE’s small case discussed in Section 5.3.3.2. In the case of BSRE’s payoffs to the local residents, NGOs were chosen as the mediators to solve the payoff disputes, which not only helped BSRE to improve its green performance, but also helped the local NGOs to expand social influence and attract more funds, as well as softening the ‘love-hate’ relationship between the local governments and the local NGOs.

Now, the Chinese decision-makers are still at a crossroads regarding the rapid development of NGOs at the current stage. The ‘love-hate’ relationship vividly describes the hegemonic struggles between the state and civil society in China: on the one hand, the state has realised the importance of roping NGOs into a soft authoritarian governance regime to undertake certain social responsibilities and promote the demoralisation process; on the other hand, the suspicions and fear that vibrant and powerful grassroots movements could challenge the authorities have resulted in strict government control over NGO activism. In recent years, although it is still not likely that the central state will amend the *1998 Amendment* to relax the strict registration requirements for NGOs, as illustrated in Section 5.3.1.2.2, the state has already shown a certain degree of tolerance towards most unregistered NGOs’ existence, with more focus on the legality



of NGOs' activities, rather than the legality of NGOs themselves. This has left a broader space for the expansion of grassroots NGOs in the foreseeable future, promoting China's democratisation process. The 'love-hate' relationship between government agencies and NGOs in China's state-dominated governance regime requires more empirical studies and further observation in the foreseeable future with the further deepening of China's democratisation process.

In summary, based on a timeline, this research followed the three dimensions of Fairclough's CDA approach to carry out a textual analysis to describe the different roles of the state, business and civil society under the different genres of discourse; then a process analysis was conducted to interpret how the different textual elements hang together to construct the entire discourse of China's environmental governance; and finally a social analysis was carried out to explain the hegemonic struggles in alliance building and accommodation between state and non-state actors in the development of China's environmental governance. At the initial stage of China's sustainable development, the state still matters significantly in dealing with all kinds of environmental issues in business, for example, in BSRE's case, making payoffs, governing polluted sites and supporting corporate green upgrade; although there still exists disagreement regarding green growth plans within internal government departments, as discussed in Section 5.3.3.1. Corporations, especially those in heavy industries, are required to focus on their environmental performance and to set out on a real sustainable development road. At the initial stage of the development of civil society, green NGOs usually play the roles of environmental monitor and conflict mediator, rather than taking direct actions to fight against corporate pollution activities and influencing decision-making in the public environmental programmes.

With consideration of the specific politico-economic heritages and particular historical trajectories, the critical discourse analysis in this research provides a dynamic and comprehensive understanding of the history of environmental governance of China's rare earth industry and bridges the empirical gap for China's environmental governance studies within the neo-Gramscian framework. Based on the empirical findings on the changes in China's institutional diversity at the macro level, and the changes in hegemonic struggles among three pillar actors over the environmental domain in the rare earth industry at the micro level, as well as the distinctive discourse of civil society, the researcher links them to the theoretical framework of this research, and illustrates how this empirical study on the changing discourses of varieties of environmental governance in China's rare earth industry contributes to both the

‘comparative capitalisms’ studies and the neo-Gramscian studies under other non-Western regimes in future, which will be further discussed in the following Section 6.3.

### **6.3 Theoretical Contribution: A Neo-Gramscian Perspective on China’s Varieties of Environmental Governance**

#### **6.3.1 Varieties of Capitalism in China**

Returning to the beginning of this research, the researcher suggested that investigating the environmental struggles in China’s rare earth industry within the particular empirical setting of Chinese governance system necessitates a deep-seated understanding of the uniqueness of China’s politico-economic system, which is significantly dissimilar to both the Anglo-Saxon model in the US and the UK, and the coordinated market economies in France, Germany and Japan. As illustrated in Section 2.1 in the literature review, post-World War II capitalism has manifested in different logics of economic activity and rules of the game (Hall and Soskice, 2001; Jessop, 2014; Morgan, 2011; Scott, 1986; Whitley, 2005, 2007), and the state, business and civil society under different regimes have different ways of influencing their respectively political contestations and negotiations (Levy and Newell, 2005). Thus, the VoC approach provides a deep insight into various systems of institutional formations and different logics of economic activities, and a dynamic understanding of China’s changing VoC over time is meaningful for discussing the changing hegemonic relations between the three pillar actors in the development of China’s environmental governance.

Although the main divisions of different typologies of regimes in comparative capitalism studies have been reviewed in Section 2.1, such as Hall and Soskice’s LMEs and CMEs (Hall and Soskice, 2001), and Rawls’ varieties of regime (Rawls, 2001; Freeman, 2007), as well as Whitley and Morgan’s VoC in the four different types of state (Whitley, 2005, 2007; Morgan, 2009), it is hard to position one typology to fit the complex Chinese politico-economic system. The unique historical-geographical heritage leads to a further layer of variation in China’s VoC. With considerable divergences and great uniqueness in its politics, China’s politico-economic regime contains multiple tactics, with multiple models of VoC within the same national boundaries. In this research, based on the specific politico-economic heritages and particular historical trajectories in China, Sections 4.2 and 5.2 identified how the politico-economic regime of the New China transformed from state capitalism to a combination of multiple models of VoC.

A unique duality for the present Chinese political economy can be identified, which is that the state continues to control capital accumulation via large SOEs, while a vibrant network of private and hybrid ownership corporations form the bulk of the private sector (McCann, 2014; McNally, 2012). The current Chinese politico-economic regime, as a combination of market autonomy and administrative regulation, enriches the conventional divisions of VoC with ‘a form of state-manipulated market economy’ (Harvey, 2005, p. 122).

However, the VoC approach to the contemporary diversification of political economies is no longer firm-centred (Hall and Soskice, 2001), since institutional pluralism has also been documented in the modern VoC. The contemporary diversity of politico-economic regimes is steered by the varieties of participation of the state, business and civil society in institutional formations along different lines (Buhr and Frankenberger, 2014; McCann, 2014; Morgan, 2011; Whitley, 1999, 2007). Many scholars in ‘comparative capitalisms’ studies critique the VoC approach as providing the abstract and macro-level divisions of post-World War II economic structures, with a lack of micro-level consideration of diversity of hegemonic positions of multiple actors and their strategic interactions with each other in contemporary alliance building (Bieling, 2014; Bailey and Shibata, 2014; Bruff and Ebenau, 2014; Bruff and Hartmann, 2014; Coates, 2014; Gallas, 2014; Jessop, 2014; Weiss, 2014). Thus, toward the critique of the VoC approach, identifying the changes in China’s distinctive institutional diversity necessitates an independent and dynamic analysis of the political contestations and negotiations among the different levels of government, corporations and NGOs in China’s unique governance regime, which will be further discussed in the following section.

### **6.3.2 Varieties of Governance in China**

Up until now, Gramsci’s thoughts have been widely used to discuss the power structures within the global political economy (Cox, 1983; Jessop, 2013; Laclau and Mouffe, 1985; Levy and Egan, 2003; Levy and Newell, 2005; Levy and Spicer, 2013; Mouffe, 1979; Murphy, 1998; Spicer and Böhm, 2007). Historically, hegemonies founded by powerful states have undergone a complete social and economic revolution (Cox, 1983), which modified the national economic and political structures of ‘big government’ before the 1990s (Evans, 2012). Since the 1990s, with the shift of power from government to governance, the hegemonic struggles between the state, business and civil society have been the crucial elements in constituting a combination of political, economic and social structures on a given terrain as well as in the global political and

social order. Thus, the neo-Gramscian approach, integrating agency, dynamics and power into field-level politics, provides a collective perspective on the different dynamics of contemporary political contests engaging a variety of actors, which enrich the ‘lean’ societal theory and politico-economic theory in VoC, and offer a rich theoretical framework for further comparative capitalism studies. A neo-Gramscian perspective on China’s VoC help the VoC approach to contextualise the institutional variations of governance in China; and more specifically, provide an interpretative and dynamic understanding of the exercise of state power to regulate and coordinate the hegemonic coalitions between the state, business and civil society in China’s unique governance regimes from a planned economy to a market economy.

However, although the neo-Gramscian approach provides a valuable theoretical framework with which to analyse the unique institutional diversity in the environmental governance of China’s rare earth industry and the hegemonic struggles among the state, business and civil society that evolved therein, most neo-Gramscian studies on environmental governance, as critiqued in Section 2.3.4 and Section 2.3.5 in the literature review chapter, set within the neo-liberal countries, such as the US, the UK, and Australia. In other words, most Gramscian governance studies are Anglo-Saxon centred, and as such are always overly focused on a pluralistic interpretation of Gramsci from a neoliberal perspective. Although essentially implying that all three main actors have similar access to power in environmental governance, most Gramscian governance research overemphasises the corporate political power and NGOs’ counter-hegemonic power to outmanoeuvre state power, with less attention given to clarifying the re-regulation and re-configuration of state power in contemporary alliance building.

The researcher has been more critical of the de-empowerment of the state in neo-Gramscian studies, with the institutional variations of the Chinese state and the power relations that evolved as well as the hegemonic struggles within the Chinese state-dominated governance regime. Thus, a comprehensive understanding of the unique features of China’s varieties of governance also necessitates the VoC approach, with a deep insight into the distinctive politico-economic regime in China. Many scholars in comparative capitalism studies place particular emphasis on the re-empowerment and re-regulation of the state in contemporary political contestations along different lines, so as to develop the debate on capitalist diversity: for example: different roles of the state in contemporary alliance building (Freeman, 2007; Mäkinen and Kourula, 2012; Morgan, 2009; Rawls, 2001); varying degrees of government involvement in political systems (Steurer, 2013); different types of state and complementary institutions (Whitley, 2005, 2007);

and different mechanisms of state power to impose specific patterns of valorisation, appropriation and dispossession (Jessop, 2008, 2014). Bob Jessop has clear ideas on the paradox of state power, which is embedded in the structural coupling of the economic and political, and linked to different forms of civil society (Jessop, 1997, 2008). Even in the most neo-liberal countries, the state is still important in creating and preserving the institutional framework for the neo-liberal market and guaranteeing the proper functioning of markets (Harvey, 2005), as well as resolving economic, political and social problems in a coherent way, facing the emerging crisis of neoliberalism (Jessop, 2010). These studies view that the state still matters today in constructing the institutional variations and securing the functioning of organisational structures in varieties of governance, especially in non-market areas, such as environmental pollution and climate governance. Thus, the emphasis of institutional variations of the state and the diversity of power relations therein in the VoC studies provides a new perspective to extend the Western-based neo-Gramscian approach to other non-Western regimes.

The unique Chinese institutional diversity provides an important counterpoint to the varieties of governance structures in Western countries. Thus, with increasingly pluralistic themes of roles of government agencies, corporations and civil society as well as ever more complicated hegemonic struggles among them under China's distinctive governance regime, the researcher merged a neo-Gramscian approach with the VoC approach to construct a valuable framework – varieties of governance – with which to discuss the hegemonic struggles among the state, business and civil society in the development of China's rare earth industry at both a macro and micro level. The neo-Gramscian perspective on China's varieties of governance, with a dynamic understanding of organisational fields populated by multiple actors to advance their respective interests in rational ways through strategic interactions with others, is meaningful for clarifying the institutional variations of the different types of state and the diversity of hegemonic struggles evolved therein in the development of environmental governance of China's rare earth industry and identify the varieties of governance in China with both historical depth and comparative breadth.

On the basis of the development of politico-economic regimes from state capitalism in a planned economy to a combination of multiple models of VoC in a market-oriented economy in China, from a neo-Gramscian perspective on China's varieties of governance, the empirical findings in the analytical chapters identified the changes in genres of China's varieties of governance, at the macro level, shifting from highly prescriptive planning to government supervision, based on the case study of BSRE in the governance of China's rare earth industry.

More specifically, the development of China's institutional diversity after the foundation of New China can be divided into two main stages, on the basis of a shift from state capitalism to a combination of multiple models of VoC. From the 1950s to the early 1990s, China had experienced a long period of state capitalism, in which the prescriptive central planning determined nearly every aspect of economic activities and social life. The establishment of political rules and economic structures were under a government-led development model, and the institutional diversity was monotonous and strictly limited by the newly established but powerful central state. According to the *First Plan* quoted as *Extract 1.5* and the *Second Plan* quoted as *Extract 1.6*, as the national development principles during the planned economy, it can be seen that, since the state nationalised all means of production across the country around the mid-1950s, SOEs had always dominated the entire economic structure under state capitalism, and highly prescriptive plans from the SPC had determined all economic activities. According to *Extract 1.5*, in order to strive for a high rate of economic growth and socialist industrialisation, the central state implemented 'Three Great Transformations' to transform the agriculture, handicraft and capitalist industry and commerce into national properties, and accumulate capital in a capitalist manner on a national level. Through the socialist transformation to nationalise all private and capitalist means of production, according to *Extract 1.6*, the central state concentrated investments in development of heavy industries in China, especially the steel and iron manufacturing industry, so as to realise industrialisation rapidly. As illustrated in Section 4.2.1, on the basis of a series of significant accomplishments led by the CPC, including the foundation of New China in 1949, the completion of the socialist transformations in the following years, and the rapid improvements of the rate of capital accumulation and the populace's living standards since the late 1950s, the CPC had won sufficient confidence and full support of the proletariat in Chinese society, and both SOEs and Chinese citizens became subjects of the hegemony of the central state in governance during the planned economy.

Since 1978, with the deepening of the reforms and opening-up of the Chinese market, a series of economic reforms with limited introduction of market principles had begun to effect changes in ways of acting in governance in China. By gradually reintroducing markets and incentives within a planned economic system in New China, the market force started to work together with central planning via a dual pricing system. However, until the target of establishing a 'socialist market economy' was proposed in the early 1990s, the central administrative plans had still played a dominant role in Chinese political rules and economic activities, and SOEs still controlled the

entire national economy. Thus, before the early 1990s, China had never moved away from a command economy, and many institutions required to facilitate and operate a market economy had been rudimentary or missing completely. During the planned economy from the 1950s to the early 1990s, from *Extract 1.3*, in a ‘socialist’ but state-dominated society, it was forbidden for the populace to establish NGOs; thus no NGOs existed under such a high command era in China. As pointed out in Section 5.2.2, under such rigid politico-economic control, there were no real labour markets, nor freedom of speech for the press or the public.

In the context of such state capitalism, both the business sector and the populace maintained the hegemonic acceptance of the core values of the CPC, and the central state manifested its intellectual and moral hegemony in its method of adopting a government-led development model and nationalising all private means of production to ‘work out a path of socialist modernisation with Chinese characteristics’ (Liu, 2011, p. 1). In short, the empirical findings pointed out that, during the planned economy, due to the special historical and political trajectories in China, the central state determined all economic activities via the strict control of SOEs, such as the number and variety of products, pricing and distribution of goods and services, proportion of consumption and investment and so on; and all social activities such as education, employment, housing, medical treatment and so forth. Under such an authoritarian governance system, the populace accepted, or at least became accustomed to government control and highly prescriptive plans, with public acquiescence to the CPC’s supreme power and autocratic ideologies in governance.

Since the early 1990s, the politico-economic system in China has gradually transformed to a market-oriented economy, in which market and plan have coexisted until now. Deng Xiaoping’s visit to southern China in 1992 marked a new wave of market-oriented reform, during which the new national target of ‘establishing a socialist market economy’ was confirmed. Since then, the state has begun to decentralise management power in the economic system to the corporate level, and introduced a series of market mechanisms to the Chinese economic system, which manifested in the dramatic downsizing of SOEs, the mass redundancies in state-owned industries, the nationwide corporate reforms to establish modern enterprises and the massive expansion of private and foreign-funded enterprises in the Chinese market. Based on the case study on BSRE in Baotou’s rare earth industry, from *Extracts 2.1, 2.2, 2.4, 2.6 and 2.11*, it can be concluded that, for SOEs’ corporate governance, the different levels of government have changed their role from ‘manager’ to ‘supervisor’. Moving to the market-oriented economy, owing to the complex

institutional foundations, the profound historical, political and economic impacts, and the complicated geomorphology and regional environment, the empirical findings summarised in Section 5.2.2 depict China's contemporary politico-economic regime as a combination of multiple models of VoC, with a mixed economy of state actors such as SOEs, semi-state actors such as collectives and TVEs, and private actors such as domestic private enterprises and foreign-funded enterprises.

Compared with the dramatic changes of government control over the economic sphere, under the multiple model of VoC in today's China, there have been relatively fewer changes in the social sphere. China's traditionally historical and political trajectory of 'government of men' rather than 'laws' is meaningful even in present society. Although the state has relaxed restrictions on public discourse to promote China's democratisation process, the freedom of speech of the press and the populace has still been constrained under the soft authoritarian governance of the CPC, so as to secure a 'grand but unspoken bargain' between the CPC and Chinese civil society. Although the state has realised that certain collective activities in the public environmental arena ought to involve NGOs, NGOs' activism, as the only legitimate way for the public to participate in public affairs, has been strictly supervised by the relevant authorities under a dual administration system. Although the state has gradually become open to the mass media's new role of 'mouthpiece of society', the original role of 'mouthpiece of the Party' is still firmly secured. As a result, due to the lack of Western traditions of civil society, individual rights, impersonal trust and the public-private division, the historical and political trajectories of 'government of men' in a command economy have left impressive influences on today's varieties of governance in China.

This research, by merging the neo-Gramscian approach with the VoC approach at an organisational level, discussed the institutional variations of the state in governing China's rare earth industry and the power relations that evolved therein. With consideration of China's unique historical roots, political trajectories, national cultures and social traditions, it can be clearly concluded that the overtone of 'big government' still manifests in today's governance regime in China, and the state achieves its hegemony over civil society and the business sector in governing China's rare earth industry based on the soft authoritarian regime, in which the plan and the market coexist. A dynamic understanding of China's varieties of governance enriches the abstract divisions of regime in the VoC research and extends the Gramscian governance studies to a wide range of state-dominated regimes. On the one hand, the empirical findings concerning the changing politico-economic regimes in China, as shown by the two *pink rounded rectangles*



in *Figure 6*, with consideration of micro-level hegemonic struggles between the state, business and civil society, provide a collective and dynamic understanding of the diversity of institutional foundation and formation in China and enrich the relatively abstract divisions in the VoC approach. On the other hand, the empirical findings concerning the changing hegemonic struggles under the different governance regimes in the development of China's varieties of environmental governance, as shown by the two *green rounded rectangles* in *Figure 6*, with macro-level consideration of politico-economic diversity, provide a deep insight into the diversity of politics and logics of economic activities for the neo-Gramscian approach, and help to identify the uniquely political and economic characteristics of the Chinese contexts directing to the distinctive hegemonic coalitions and bargaining processes over the environmental regime.

Thus, based on a neo-Gramscian perspective on China's varieties of governance, the analytical chapters in this research, through combining a macro-level analysis of institutional diversity with a micro-level understanding of organisational struggles, identified the changing discourses of environmental governance of China's rare earth industry with both historical depth and comparative breadth. On the basis of the dynamical investigation of the institutional diversity of Chinese governance regimes from a planned economy to a market economy, the researcher proposed a neo-Gramscian perspective on China's varieties of environmental governance to investigate the exercise of state power in regulating and coordinating hegemonic alliance building over the environmental domain in the development of environmental governance of China's rare earth industry, with a particular focus on the discourse of civil society, which will be further discussed in the following section.

### **6.3.3 Varieties of Environmental Governance in China**

Since the 1980s, with the deepening of globalisation and internationalisation, the emergence of a huge number of environmental problems has called for a new method of environmental governance. As a new threat to hegemony in governance, as pointed out by Levy and Newell (2005), Gramsci's hegemony is meaningful in illustrating the particular assembly of economic, political and discursive relations that bind a network of state and non-state actors in environmental governance. Based on the neo-Gramscian understanding of hegemony, Levy and his colleagues illustrate how the state agencies, corporations and NGOs establish hegemonic coalitions in building policies and norms in environmental governance (Levy and Egan, 2003; Levy and Newell, 2005; Levy and Kaplan, 2008; Levy and Spicer, 2013; Levy et al., 2015).

Returning to Section 2.3.4 in the literature review, at the current stage, most studies on China's environmental governance in Chinese academia place more focus on how the different levels of government regulate the sustainable development process or how the heavy industries have changed their extensive production model to the intensive production model, and usually lack an integral consideration of the institutional variations of the state and power relations that evolved, as well as a dynamic framework to incorporate multiple actors into China's varieties of governance, which has called for a new method of environmental governance. Gramsci's hegemony has been widely used by Levy and his colleagues to illustrate the particular assembly of economic, political and discursive relations that bind a network of actors in environmental governance. Levy and his colleagues' research, with particular emphasis on the importance of private regimes in challenging groups with superior resources, contributes greatly to neo-Gramscian studies on environmental governance.

However, although Levy uses the neo-Gramscian framework to imply that all three main actors have similar access to power in environmental governance, most of his writings are overly focused on a pluralistic interpretation of Gramsci and fail to provide clear interpretations and explanations on the exact themes of government roles and how they function in constructing contemporary governance regimes. Thus, to a certain extent, a western-biased perspective prevents the neo-Gramscian approach being applied in other governance regimes. For example, Southern Africa has experienced a long period of regional cooperation; under such regionalism, inter-governmental organisations play a key role in an effective region-building process to combat the negative impacts of climate change (Nathan, 2012; Saunders et al., 2012; Söderbaum, 2007). The countries in East Asia, such as China and Indonesia, as well as Japan and its emulator states such as South Korea and Singapore, formerly took a soft government-led path-dependency (Brandt and Rawski, 2008; Johnson, 2002; McCann, 2014). Under such soft authoritarianism, the different levels of government still play a key role in leading environmental governance development. Post-World War II capitalisms have displayed great variations of hegemonic struggles among the state, economic structure and civil society over the environmental domain; thus, there is a need to have a more plural view of what is going on in other politico-economic systems of the world, with macro consideration of VoC.

Therefore, the researcher has integrated the neo-Gramscian approach and the VoC approach into the discourses of varieties of environmental governance in China's rare earth industry, to analyse

the institutional variations of the state in China's environmental governance of the rare earth industry and the hegemonic struggles involved therein from a planned economy to the current market-oriented economy. During a planned economy, the state achieved its hegemony by way of highly prescriptive commands, and all SOEs functioned as 'processing plants' to fulfil government orders. Without the environmental awareness of the central state, environmental governance formerly gave way to economic growth under an extensive growth model. Moving to the current market-oriented economy, the unique historical and politico-economic trajectories still retain the 'big-government' overtone in China's institutional diversity. Under government supervision, corporations have begun to place more focus on their environmental performance, so as to satisfy the government requirements, meet the national standards and increase green competitiveness in the global market; and green NGOs have increasingly played the roles of environmental monitor and conflict mediator. In the initial stage of China's sustainable development, the state still matters significantly in dealing with all kinds of environmental issues in business, for example, in BSRE's case, making payoffs, governing polluted sites, supporting corporate green upgrade; although there still exists disagreement regarding green growth plans within government agencies. Here a particular focus is placed on the application of the neo-Gramscian approach in illustrating the unique discourse of civil society in China's varieties of environmental governance.

The neo-Gramscian framework has been widely used in governance research, from a neo-liberal perspective, to address the potential of civil society to outmanoeuvre their rivals and balance the power relation between economic structures and political rules. In most neo-Gramscian studies on environmental governance, for example by Levy, civil society is regarded as a significant battleground for broader social and political conflicts, and NGOs are regarded as the autonomous social groups challenging the power of the state and the capital in environmental governance. However, different from Western countries, NGOs in China, as the only legitimate means to involve the populace in public decision-makings and to effect transformative change in China's democratisation process, have always been under strict government control. Under the government's 'dual administration system', green NGOs in China have been much less successful and autonomous in political negotiations and contestations than those in Western countries. As the empirical findings show, the major obstacle for the vibrant development of green NGOs in environmental governance in China stems from the authoritarian nature of the Party state and its hostility to grassroots democracy. Although the state has shifted more focus to the legality of NGOs' activities, rather than the legality of NGOs themselves in recent years,

green NGOs still need to secure a ‘non-oppositional stance’ to government agencies in order that they can survive and grow. Thus, with particular emphasis on the unique discourse of civil society in China, the empirical findings in this research extend the Anglo-Saxon neo-Gramscian perspective to a state-dominated governance system, and draw a completely different image of civil society from Levy’s governance research, with consideration of the institutional variations of the state and power relations that evolved as well as the specific political heritages of China’s modern governance regime.

With a deep understanding of the Chinese historical and political trajectories and a sensitive insight into the delicate relationship between the state and civil society in China, this research analysed the uniqueness of the discourse of civil society in China’s varieties of environmental governance, identified the green NGOs as important material for analysing the involvement of Chinese civil society in China’s contemporary varieties of governance, and displayed a series of distinct images of NGOs’ activism in environmental governance of China’s rare earth industry based on several contested environmental issues discussed in Section 5.3.3.1. Based on the case study on BSRE over a series of contested environmental issues in the environmental governance of Baotou’s rare earth industry, it can be concluded that the local green NGOs, under government supervision, usually played the roles of environmental monitor and dispute mediator, rather than fighting against the corporate polluting activities directly. Based on the fact that certain far-sighted corporations started to embrace green NGOs as their partners to improve their environmental management and green image in the Chinese market (for example IPE, which was briefly introduced in Section 5.3.3.2), with the deepening of the democratisation process in China, green NGOs may play the role of a ‘more equal partner with government entities in environmental conservation projects’, and be more effective in advocating their environmental concerns with relatively fewer administrative constraints (Tang and Zhan, 2008, p. 439). However, as shown by the discussion of BSRE’s payoff issue in Section 5.3.3.1, under China’s soft authoritarian governance regime, the researcher was also concerned that the requests for cooperation with local green NGOs from local governments and local SOEs or even local large private corporations to promote green propaganda and mediate payoff disputes are more likely to challenge their neutral positions and bottom lines and lead certain NGOs with ambitions to improve social impacts and attract more funds to be captured by local authorities as their greening tools. This requires further observation and more empirical evidence in future studies on NGO activism in China’s environmental politics.

## 6.4 Conclusion

The discussion chapter summarised the empirical findings in the previous two analytical chapters and linked the empirical findings to the theoretical framework in the literature review chapter to discuss the importance of this research to move forward the theories and approaches in the VoC and neo-Gramscian studies. First of all, from the empirical findings, it can be concluded that China's politico-economic regime has transformed itself from state capitalism to a combination of multiple models of VoC, which enrich the relatively abstract typology divisions in the VoC studies with China's unique institutional diversity. Secondly, based on the politico-economic diversity in China, the research, with a neo-Gramscian perspective, concluded that the genres of the discourses of China's varieties of governance have been transformed from highly prescriptive planning to government supervision. The modern governance regime in China still maintain a 'big-government' overtone, under which the state plays a significant role in political contestations and negotiations, and civil society, mainly exemplified and embodied as NGOs, has been greatly impeded by government restrictions, incompetence, and lack of trust. The empirical findings on China's varieties of governance, analysed by merging a neo-Gramscian perspective with China's VoC, provide a collective perspective on the dynamics of contemporary political contests engaging a variety of actors in China, which enrich the relatively 'lean' societal theories in the VoC approach, and extend the Western-centric neo-Gramscian framework to China's distinctive state-dominated governance system with a completely different discourse of civil society from that in Levy's environmental governance research. Thirdly, based on the explanations of the changing hegemonic struggles in the history of environmental governance of China's rare earth industry, the research provided a more plural and dynamic understanding of the exercise of state power to regulate and coordinate the hegemonic coalitions between the state, business and civil society in the Chinese varieties of governance, which enriches the neo-Gramscian governance studies with emphasis on the re-empowerment and re-regulation of the state and the unique discourse of civil society in the contemporary alliance building of China's environmental governance. Therefore, the empirical studies in this research, through combining a macro-level analysis of politico-economic diversity with a micro-level understanding of hegemonic struggles among multiple actors at an organisational level in the environmental governance of China's rare earth industry, are meaningful for further VoC studies on the dynamics of institutional diversity and further neo-Gramscian studies on varieties of governance regimes.

## CHAPTER SEVEN: CONCLUSION

### 7.1 Summary of Research

Moving into a new era of low-carbon economy and green growth, the global demand for rare earths has been greatly driven up by a series of high-tech and new-energy industries. Although rare earths have been widely utilised in ‘clean’ technology to alleviate the environmental crisis, the processes of mining, smelting and separating rare earth ores cause heavy pollution, disposing considerable waste gas and water with a high concentration of toxic and radioactive residues. China supplies more than ninety percent of global rare earth materials, and over-exploitation of rare earth ores over the years has seriously polluted and poisoned the ecological environment in China’s rare earth mining areas. In recent years, with ever more stringent environmental requirements from the central state, environmental pollution in the upstream supply chains of many ‘clean’ industries has become the most ironic and thorny issue in China’s current environmental governance. This research investigated the development of the environmental governance of China’s rare earth industry based on the two timeline stages, from the centralised planned economy (between the 1950s and the 1990s) to the current market-oriented economy (after the 1990s).

To investigate the hegemonic struggles among government agencies, corporations and NGOs within the distinctive empirical setting of Chinese political economies, this research has argued for a neo-Gramscian perspective on the changing hegemonic struggles in the varieties of environmental governance of China’s rare earth industry. First of all, the researcher employed the VoC approach to model the changing typologies of China’s complex politico-economic systems. From the perspective of VoC, the regime in China has completed a transition from state capitalism to the current combination of multiple models of VoC. China’s institutional diversity is completely different from the discourses of Western countries, owing to its particular historical, political and economic trajectories; thus, the hegemonic coalitions and bargaining processes among the state, business, and civil society over China’s environmental regime also manifest in many unique features. Then towards the critique of the VoC approach as less considerate of the politico-economic and societal themes, historical trajectories and dynamic power relations involved, the researcher introduced the Gramscian hegemony with a broader conception of power and politics to China’s VoC, which incorporates multiple actors in the particular assembly of economic, political and discursive relations in political contestations and

negotiations over the environmental domain in China. However, although the neo-Gramscian approach implies that all three pillar actors in governance have similar access to power in environmental governance, most current Gramscian studies on environmental governance are conducted within the context of neo-liberalism with an overemphasis on non-state power in the collective action of environmental governance. It is Anglo-Saxon centred to neglect or de-empower the role of the state in contemporary alliance building. Even in the most neo-liberal countries, the state still matters in securing the functioning of markets, maintaining the cohesion of social organisations, and resolving the crisis of neoliberalism. Especially in non-market areas, such as environmental governance and climate control, state action is significant in constructing and securing the functioning of organisational structures. In VoC research, the re-configuration of state power in variations of institutional setups of post-World War II capitalism along different lines is particularly emphasised to develop the debate on capitalist diversity. Therefore, the researcher merged the neo-Gramscian approach with the VoC approach to provide a more plural and dynamic view on the institutional variations of the state and the power relations involved therein, as well as the hegemonic struggles among government agencies, corporations and NGOs. Based on a neo-Gramscian perspective on China's varieties of environmental governance, this research, through combining a macro-level analysis of institutional diversity with a micro-level understanding of organisational struggles, dynamically investigated the exercise of state power in regulating and coordinating the hegemonic coalitions in the development of environmental governance of China's rare earth industry.

Based on an in-depth case study on BSRE, which monopolises the northern rare earth industry in China, the research collected primary data from the semi-structured interviews with the Baotou local government, BSRE and environmental NGOs as well as secondary data from documentary collection. By means of the three-dimensional analysis of CDA, this research carried out a timeline analysis to illustrate the different discourses of environmental governance in the different periods of New China: a textual analysis to discuss the changing genres, discourses and styles of environmental governance, particularly the changing hegemonic positions of the state, business and civil society in the development of environmental governance of China's rare earth industry; then a process analysis to illustrate how different textual elements hang together to produce integrated discourses of China's environmental governance in two timeline stages; and finally a social analysis, from the wider perspective of political discourse, to analyse the hegemonic struggles among the three pillar actors in governance.

In accordance with the changes in China's varieties of governance, the researcher identified the changing genres of the hegemonic discourses as shifting from highly prescriptive planning in the planned economy to government supervision in the market economy, and investigated how different actors in the development of China's environmental governance are created, adapt and coordinate over time.

During the planned economy, the state achieved its intellectual and moral hegemony by way of highly prescriptive commands. Under the authoritarian governance of the CPC, the central state determined the logics of political rule and economic activities, and SOEs dominated the entire economic structure. However, under state capitalism, all SOEs functioned as 'processing plants' to fulfil government orders. Thus, without sufficient environmental concerns and requirements from the central state, both the local governments and SOEs performed poorly in environmental governance. Especially for the heavy industries, for example the rare earth industry, with the central guideline of maximising outputs and realising rapid industrialisation, SOEs were fully engaged in immoderate mining and processing activities to increase outputs and profits, promoting economic growth at huge environmental cost. Therefore, without the environmental awareness of the central state, environmental governance gave way to economic growth under an extensive growth model.

Moving to the current market-oriented economy, with the gradual establishment of the market mechanism and modern enterprise system, different levels of government have changed the role from 'manager' to 'supervisor' by decentralising their management power to the corporate level. With an increasingly open market, Western ideas of civil society and sustainability have deeply influenced the decision-makers' thoughts in China. The state has realised the importance of sustainable development and begun to play a leading role in promoting China's environmental governance practices. At the same time, with a gradual relaxation of government control over the economic structure and ultimately over public discourse, civil society, mainly exemplified and embodied as the development of NGOs, has gradually acted as a visible player in China's environmental governance. Under government supervision, the potential of non-state actors in securing sustainable development has gradually been unlocked: corporations have begun to place more focus on their environmental performance, so as to satisfy the government requirements, meet the national standards and increase green competitiveness in the global market; and green NGOs have increasingly played the role of environmental monitor and conflict mediator, rather than taking direct actions to fight against corporate pollution activities. In the initial stage of



China's sustainable development, the state still matters significantly in dealing with all kinds of environmental issues in business, for example, in BSRE's case, making payoffs, governing polluted sites, supporting corporate green upgrade; although there still exists disagreement regarding green growth plans within internal government departments.

In short, under the current regime of soft authoritarian governance in China, it can be concluded that the state acts in a supreme role in developing environmental policies and regulations, exploring green strategies and techniques, monitoring and supervising industrial green performance; corporations, directly involved in environmental pollution, also play a significant role in improving their environmental performance and green competitiveness in a global market; and green NGOs, whose potential in the hegemonic struggle has largely been restricted by the government's 'dual administrative system', have made limited but inspiring progress in facilitating collective action in China's environmental governance. The unique historical and politico-economic trajectories of one-party dominance over 5,000 years are still reflected in the 'big-government' overtone in today's institutional diversity of China. According to Harvey (2005, p. 151), China is moving towards 'neoliberalisation and the reconstitution of class power, albeit with distinctly Chinese characteristics'. With the deepening of the democratisation process in China, Gramscian hegemony may manifest a different meaning in the further development of China's varieties of environmental governance.

## **7.2 Contribution of Research**

The theoretical framework and empirical findings offered in this research made a number of contributions to the VoC approach to institutional diversity and the neo-Gramscian studies on environmental governance. First of all, based on the major divisions of VoC, this research identified China's unique politico-economic regimes shifting from state capitalism to the current combination of multiple models of VoC. With considerable divergences and great uniqueness in its politics, China's current politico-economic regime contains multiple tactics and models. Based on the specific politico-economic heritages and particular historical trajectories in China, the empowerment of the state after the foundation of New China and the re-configuration of the state power after the start of the market-oriented reform have been identified as the unique characteristics of China's changing governance regimes, which enriched the conventional divisions of VoC in the 'comparative capitalisms' literature with 'a form of state-manipulated market economy' (Harvey, 2005, p. 122).

Secondly, the research summarised the major critiques on the abstract and macro-level divisions of VoC, as lacking of consideration of societal themes of power relations and political contestations within varying regime typologies. Reacting to these critiques, the researcher merged the neo-Gramscian approach with the VoC approach to provide a dynamic and micro-level understanding of the hegemonic struggles in China's varieties of governance. On the one hand, the VoC approach helps the neo-Gramscian framework to identify the unique political and economic characteristics of China's institutional formations; on the other hand, the neo-Gramscian approach, with consideration of hegemonic struggles among multiple actors, provides a dynamic understanding of the ideological, political and social dimensions of institutional diversity in China's unique governance regime. With a neo-Gramscian perspective on China's VoC, the changing genres of varieties of governance in China were identified as evolving from highly prescriptive planning to government supervision in the context of China's soft authoritarian regime.

Finally, as environmental issues are a new crisis to hegemony, although the neo-Gramscian approach provides a valuable theoretical framework with which to analyse the changing hegemonic struggles among the state, business and civil society in China's environmental governance, most existing Gramscian governance studies, for example, by David Levy and others, are set within neo-liberal countries, and focus overly on a pluralistic interpretation of Gramsci from a neoliberal perspective. In other words, with overemphasis of corporate political power and NGO's counter-hegemonic power, most neo-Gramscian studies on environmental governance are Anglo-Saxon centred with less attention to clarifying the re-regulation and re-configuration of state power in contemporary alliance building, although essentially implying that all three main actors have similar access to power in environmental governance. This research has been more critical of that by the illustrations of the institutional variations of the state in China's political negotiations and contestations and the explanations of the exercise of state power to regulate and coordinate the hegemonic coalitions in the environmental governance of China's rare earth industry.

Thus, to extend the neo-Gramscian framework to China's unique soft authoritarian governance regime and investigate the changing discourses of environmental governance of China's rare earth industry, this research proposed a neo-Gramscian perspective on varieties of environmental governance, through combining macro-level analysis of institutional diversity with micro-level

understanding of hegemonic struggles. Following Fairclough's CDA approach, the research carried out a textual analysis to describe the different roles of the state, business and civil society in contestations over the environmental domain in China's rare earth industry; then a process analysis to interpret the changing discourses of the development of environmental governance of China's rare earth industry; and finally a social analysis to explain the changing hegemonic struggles among government agencies, corporations and green NGOs over a series of environmental issues in China's rare earth industry. Based on the CDA approach, the research identified the varieties of governance in China at the macro level, discussed the changing hegemonic struggles in the environmental governance of China's rare earth industry at the micro level, and particularly illustrated the unique discourse of civil society in China's state-dominated governance regime, which bridged the empirical gap for the Gramscian governance research in China's unique environmental governance regime and displayed a series of distinctive images of the environmental struggles in China's rare earth industry.

### **7.3 Limitations of Research and Suggested Areas for Further Research**

Although a number of theoretical and empirical contributions are made by this research, the researcher must acknowledge that there are some limitations of the research. First of all, there is only one case study on BSRE to analyse the development of environmental governance of the rare earth industry in China, although it is the most typical case to represent the development of the Chinese rare earth industry after the foundation of New China, and its green performance has attracted global attention from government authorities, firms, scholars and the global media to Baotou's rare earth industry. The empirical evidence obtained from the researcher's fieldwork is also appropriate for illustrating the changing roles of the different levels of government, corporations and green NGOs and their hegemonic struggles in the development of environmental governance of China's rare earth industry.

At the initial stage of the development of NGOs in China, there is a relative lack of empirical evidence for grassroots green NGOs playing an active role in environmental governance. In this research, the only empirical evidence is that the local green NGOs played the role of environmental monitor to disclose the corporate polluting activities, and then played the role of mediator to deal with the payoff disputes between the local residents and BSRE. The influence of IPE's pollution maps, as another small example, is briefly illustrated in Section 5.3.3.2, to display the biggest progress that grassroots green NGOs have achieved at the current stage in

China. This can particularly be investigated as another case in future, to discuss the influence of NGO activism in environmental governance with the deepening of the democratisation process in China.

As mentioned before, at the current stage, cooperation requests with grassroots NGOs from local governments and local businesses usually have certain ulterior motives. In most cases, they need an organisation with public trust to deal with public discontent or improve public recognition. Within the soft authoritarian governance system in China, the concern of how to prevent green NGOs being captured as greening tools by local governments or large SOEs has challenged the efficiency of the development of China's environmental governance in the foreseeable future as well as the hegemonic relations in China's further democratisation process. The opportunities to 'cooperate' with local governments and large SOEs may challenge NGOs' neutral positions, original principles and bottom lines. Although there is no empirical evidence for NGOs' self-lost cooperation with the state and capital in pursuit of higher social status, greater social impact and increase social funds, the researcher still has a certain degree of concern that with the vibrant development of civil society in China, certain self-serving NGOs with unresponsive and underskilled staff may act only for their own private interests, which necessitates further in-depth investigations and on-site observations of the activism of NGOs in the future development of China's environmental governance. With the deepening of democratisation process in China, Gramscian hegemony may manifest a different meaning in the further development of China's varieties of environmental governance.

#### **7.4 Concluding Remarks: Environmental Concerns of the Global Rare Earth Industry**

As the world moves into a new era of low-carbon economy, global demand of rare earths has been driven up greatly due to the huge consumption in high-tech and new-energy industries, which has led to the shortage of rare earths in the global market. Moreover, the global geological distribution of rare earth ores has led the supplies to be concentrated in a few countries. China, with more than 36% of the world's reserves of rare earths, provides more than ninety percent of global consumption. The application market of rare earth materials, covering a wide range from precision missiles to smart phones, is mainly concentrated in China, Japan, the US, and some European countries such as Germany and France. The US and Japan are the two largest consumers of rare earth materials, and account for nearly 60% of world total consumption of rare earths. Although Japan does not have rare earth deposits, it achieves the highest value-added of

rare earths in the world: for example, in Japan, the total import amount of rare earth metals is about 38,000 tons annually and only two automotive manufactures, Honda and Toyota, could consume all of this quota (Melfi et al., 2008; Spiegel, 2010; Zhang and Qiu, 1999).

In the new era of green growth, according to Mason (2009), for green capitalism, there are mainly two core technologies, including manufacturing permanent magnets used in almost all gadgets guided by computers, and manufacturing battery powered cars to replace the traditional petrol or diesel engines. Both of these two technologies rely heavily on rare earths. Motor vehicles are widely regarded as one of the most significant contributors to global warming (Decicco and Fung, 2006). In order to reduce carbon emissions and greenhouse gas when engines burn fuel, hybrid cars running on a combination of liquid fuel and electricity and pure-electric cars have been widely developed to meet the requirements of sustainability. Marketed as being environment-friendly, pure-electric and hybrid cars have been racking up big sales in recent years, especially stimulated by higher prices of petrol and diesel.

However, although rare earths have been widely regarded as an energy-efficient resource for many new-energy and high-tech industries to alleviate the environmental crisis, the mining, smelting and separating activities of rare earth ores in the upstream supply chains produce heavy pollution. As the largest rare earth supplier in the world, China's rare earth industry has generated a huge amount of toxic and hazardous gases and waste water with a high concentration of radioactive residues, which has heavily polluted and poisoned the Chinese ecological environment system. In an article in the Daily Mail, as mentioned in Section 5.3.2.2, the true cost of Britain's clean, green wind power experiment is attributed to the heavy environmental pollution on a disastrous scale in China, and the authors of the article appealed for wider focus on the incredible environmental cost caused by the expansion of the global rare earth industry (Parry and Douglas, 2011).

Since the 1990s, the central state in China has gradually realised that the rare earth industry, as a typically high-energy-consuming sector in the steel and iron industry, and also with the obvious nature of a heavily-polluting chemical industry, has caused a large number of 'very tricky' environmental problems. Since 2005, the MIIT and the MC have begun to implement control over the total mining amount of rare earth ores and the total output amount of rare earth materials. The highly prescriptive plans emerged in the rare earth industry again to cut the export quota of rare earth metals by 0.5% in 2005, 7% in 2006, 3% in 2007, and 6% in 2008 (Treadgold and

Kelly, 2008). The export restriction plans sent the prices of rare earths skyrocketing in the global market, and they increased by more than 13 times from 2008 to 2011 (Bernstein Group, 2011). According to Bourzac (2011), even without the export restrictions in China, the worldwide supply of rare earth metals will soon fall short of demand. Due to the severe supply shortage of rare earths, recent market surveys show that the production processes of wind turbines and electric vehicles have slowed down (Pool, 2012; Nesbit, 2013; Hammond and Mitchell, 2014).

Facing export restrictions in China, a few countries have begun to develop strategies to secure the supplies of rare earth materials, such as exploring new mines and re-mining old mines. For example, in 2011, Japan launched a \$200 million programme to secure the supplies of rare earths for domestic manufacturing through developing new suppliers in Mongolia, Australia and Vietnam (Bourzac, 2011). The largest rare earth mine in the US, in Mountain Pass, California, was also re-mined in 2012 to serve the increasing domestic needs. This mine in California had provided 100% of the rare earth consumption in the US market in the mid-1980s, but dwindled with China's increasing supply (Venton, 2012). Backing Levy and Newell's edited book, *'The Business of Global Environmental Governance'*, with the new round of the vibrant boost of rare earth mining and processing activities worldwide, increased attention should be paid to the environmental performance of the global rare earth industry. The state agencies, multinational corporations, international NGOs and intergovernmental actors should be more actively involved in contestations over structures and the process of global environmental governance, with particular emphasis on the environmental performance and green competitiveness of the global rare earth industry.

## **Appendices**

### **Appendix I – Guided Questions of Interviews**

The interview guide provides the major questions in the semi-structured interviews with the government officers from the Baotou government, corporate managers from BSRE and environmental officers from the different green NGOs.

#### **A. Introduction**

- a) Explanation of purpose of research, relevance and importance of the interview
- b) Explanation of anonymity and confidentiality of interview
- c) Explanation of rights of interviewee

#### **B. Background Information**

- a) Name of interviewee (optional)
- b) Institution of interviewee

#### **C. Interview Questions for government officers**

- a) General questions:
  1. Could you briefly introduce your department? What is the main role of your department?
  2. What do you think about environmental governance?
  3. What does environmental governance mean to your department?
  4. In your opinion, what are the most distinctive features of the Chinese rare earth industry?
- b) Questions on the planned economy:
  5. What were the roles of the central and local governments in BSRE's management in the planned economy?
  6. In your opinion, how did BSRE perform in corporate governance during the planned economy period? Why?

7. What roles did the central state/the local governments/BSRE play in the environmental governance of the rare earth industry in that period? Could you give an example?
  8. What do you think about the low efficiency of China's environmental governance during the planned economy? What was the most significant reason for this low efficiency in your opinion?
  9. As we all know, in the 1990s, Baotou's rare earth industry encountered serious mining chaos. Why did this happen in your point of view? Could you offer me more details?
- c) Questions on the market economy:
10. After the 1990s, do you think the roles of the central and local governments in BSRE's management changed? What are the differences between the past and the present situations?
  11. Does BSRE behave differently in corporate governance? What are the differences between the past and the present situations?
  12. Regarding the environmental governance of the rare earth industry, after the 1990s, what are the changing roles of the central state/the local governments/BSRE in your point of view?
  13. In your opinion, do green NGOs play an important role in the current environmental governance system? Why?
  14. How did the local governments support BSRE's industrial integration? What are the main challenges to the consolidation of the rare earth industry?
  15. Which do you think is more important in the current government decision-makings: economic growth or sustainable development? Is there any conflict between the different governmental institutions in drafting strategies?

#### **D. Interview Questions for corporate managers**

- a) General questions:
1. Could you briefly introduce BSRE? What are the advantages of BSRE in China's rare earth industry?
  2. What do you think about environmental governance?
  3. What does environmental governance mean to your company?
- b) Questions on the planned economy:



4. What were the roles of the central and local governments in BSRE's management in the planned economy?
  5. In your opinion, how did BSRE perform in corporate governance during the planned economy period? Why?
  6. As we all know, in the 1990s, Baotou's rare earth industry encountered serious mining chaos. Why did this happen in your point of view? Could you offer me more details?
  7. What roles did the central state/the local governments/BSRE play in the environmental governance of rare earth industry in that period? Could you give an example?
  8. What do you think about the low efficiency of China's environmental governance during the planned economy? What was the most significant reason for this low efficiency in your opinion?
- c) Questions on the market economy:
9. After the 1990s, do you think the roles of the central and local governments in BSRE's management changed? What are the differences between the past and the present situations?
  10. Does BSRE behave differently in corporate governance? What are the differences between the past and the present situations?
  11. Regarding the environmental governance of the rare earth industry, after the 1990s, what are the changing roles of the central state/the local governments/BSRE in your point of view?
  12. In your opinion, what are the main drivers for the state to focus on the sustainable development of the rare earth industry?
  13. Why did your company start to pay attention to your green performance?
  14. Have you taken actions to improve your green performance? How did you do that? Could you provide more details?
  15. How did the local governments support your industrial integration? In your opinion, is there any challenge to the consolidation of the rare earth industry? If so, how did you deal with this challenge?
  16. After the industrial consolidation, is there any new governmental requirement for your green performance? Have you taken any action to respond?

## E. Interview Questions for NGO officers

### a) General questions:

1. Could you briefly introduce the aim and scope of your institution?
2. What do you think about environmental governance?
3. Have you carried out any activity to participate in China's environmental governance?  
How did you do that?
4. Do you think the mass media matters in China's environmental governance? Why? What do they mean to your activities in China?

### b) Questions on the planned economy:

5. What roles did the central state/the local governments/BSRE play in the environmental governance of rare earth industry in that period? Could you give an example?
6. What do you think about the low efficiency of China's environmental governance during the planned economy? What was the most significant reason for this low efficiency in your opinion?
7. As we all know, in the 1990s, Baotou's rare earth industry encountered serious mining chaos. Could you offer me more details?
8. In your opinion, what were the most important reasons for the ineffectiveness of civil society in China's environmental governance?

### c) Questions on the market economy:

9. Regarding the environmental governance of the rare earth industry, after the 1990s, what are the changing roles of the central state/the local governments/BSRE in your point of view? How did these changes happen?
10. Do green NGOs play an active role in the current environmental governance system?  
How do they perform?
11. Is there any obstacle or restriction preventing green NGOs carrying out green activities and participating in the public environmental programmes? How do you survive under the Chinese state-dominated governance regime?
12. In your point of view, what are the differences between NGO activism in China and in Western countries?
13. What are your major strategies to fight against corporate polluting activities?

14. Have you ever been engaged in any campaign regarding the environmental governance of China's rare earth industry? If so, what roles did you play? And how about the results?

Further open questions will be asked based on participants' replies.

## Appendix II – Lists of Interviewees

### Interviewee from Corporation

<b>Code</b>	<b>Institution</b>	<b>Interview Date</b>
COM1	<i>Department of Marketing</i>	March 28, 2013
COM2	<i>Department of Production Technology</i>	August 26, 2013
COM3	<i>General Office</i>	August 29, 2013
COM4	<i>Board of Directors</i>	September 9, 2013
COM5	<i>Board of Directors</i>	September 9, 2013

### Interviewee from Government

<b>Code</b>	<b>Institution</b>	<b>Interview Date</b>
GOV1	<i>Baotou Economic and Information Technology Commission</i>	August 23, 2013
GOV2	<i>Baotou Business Bureau</i>	August 30, 2013
GOV3	<i>Baotou Environmental Protection Bureau</i>	September 16, 2013

### Interviewee from NGO

<b>Code</b>	<b>Institution</b>	<b>Interview Date</b>
NGO1	<i>Baotou Environmental Science Institution</i>	August 22, 2013
NGO2	<i>Baotou Environmental Protection Industry Association</i>	August 23, 2013
NGO3	<i>Baotou Environmental Protection Volunteers Association</i>	September 12, 2013
NGO4	<i>Baotou Environment Federation</i>	September 12, 2013
NGO5	<i>Institute of Public &amp; Environmental Affairs</i>	March 12, 2013
NGO6	<i>Green Beagle Environmental Institution</i>	March 15, 2013
NGO7	<i>Enviro-Friends Science and Technology Research Center</i>	March 19, 2013
NGO8	<i>Institute of Green Earth Volunteers</i>	March 21, 2013

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